

THE NOR-WEST FARMER.

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THE HORSE.

Conformation of the Horse. (Continued.)

Having considered the head as a whole, we now pass on to examine more minutely its various parts, beginning with

THE EYE.

Generally speaking, this includes not only the globe of the eye, but the eyelids as well. In the horse there are three eyelids, the two ordinary eyelids and a third one—the membrana nictitans, or “haw”—which is only visible under exceptional circumstances. It is lodged at the inner angle of the eye, and moves at right angles to the other lids. Its function is to remove dust, etc., from the cornea or front of the eyeball, and when a foreign body is lodged in the eye, the haw may be seen passing rapidly across the eyeball, as if trying to remove it. In exceptional circumstances the haw may remain partially exposed at the inner side of the eye, appearing like a fleshy growth. Ignor-

in the dark. In a healthy eye the movement of the iris in contracting and expanding the pupil is quite prompt, and may be tested by placing the hand over the eye for a few minutes, and then allowing a bright light to fall upon the eye. If healthy, the pupil will contract at once. At the upper edge of the pupil may be seen some curious little bodies hanging like a fringe from the upper margin of the iris. They look like tiny balls of soot, and are peculiar to the eyes of horses, none of the other domestic animals having them. Their use is no doubt to modify the amount of light passing into the deeper parts of the eye.

Such being the principal characteristics of the eye, we may conclude by enumerating the chief beauties and defects of the eye.

BEAUTIES OF THE EYE.

1. Prominence, giving amplitude of vision.
2. Perfect equality with its fellow.
3. Brilliance and color.
4. Extent and quickness of movement of the iris.
5. Blackness of the pupil, indicating perfect transparency of the crystalline lens and

Glanders in Manitoba.

The annual report of S. J. Thompson, Provincial veterinarian, is a document of special interest. All over the province, for the last ten years, there have been numerous outbreaks of glanders, and in this year's report Mr Thompson deals with the history of these and his work in trying to stamp out the pest, which has all along been the principal contagious disease with which he has had to deal. We give below his very careful detail of the symptoms of disease, its detection, and the best means for disinfecting premises on which diseased animals have been kept.

In 1893 there were 122 glandered horses destroyed. The number went down to 42 in 1895, and rose last year to 120. The great source of this trouble has been importations from the Territories and from U. S. points, but mostly the Territories. For this statement, which is in direct contradiction to the statement made by the chief veterinarian of the Dominion, Dr. McEachran, Mr. Thompson gives a strong array of proof, supported by only too many witness-



View on Woodbine Farm, Carberry, Man., owned by S. J. Thompson & Son.

ant persons have removed it under the impression that it was a tumor of some kind, and thus deprived the horse of one of the protections to his sight: The ordinary eyelids require little comment. They have on the external surface several long, stiff hairs, longer than ordinary eyelashes, which serve as delicate organs of touch, like the antennae of insects, to warn of the approach of anything in the dark. Inside the lids is a very delicate lining of mucous membrane of a rosy color.

The eye itself presents a transparent surface, the cornea, through which are seen the iris and the pupil. The iris is a circular curtain, having an opening called the pupil, in the centre. The color of the iris gives character to the eye. It is generally brown, but in some cases is a grayish blue, and although as perfect an organ of sight as the brown eye, it is spoken of among horsemen as a “wall eye.” Occasionally one eye may be brown while the other is blue. The central opening or pupil is oval in the horse and has its longest diameter horizontal. The size of the pupil is regulated by the iris, which in bright light reduces the size of the pupil and enlarges it

of the aqueous and vitreous humors.

6. Tranquil expression combined with quickness of movement, indicating good temper and lively disposition.

DEFECTS OF THE EYE.

1. A small eye, also called a pig's eye. The globe is small and the opening of the lids contracted. It indicates a sluggish nature and coarse breeding, and sometimes disease of the organs of vision.
2. The sunken eye. In young horses this is a defect in conformation, indicating a sullen temper and defective sight; in the old it points to decay of bodily power and diminished vitality.
3. The circled or bordered eye, in which a portion of the white of the eye is visible around the cornea. It is very unsightly.
4. The eye unequal to its fellow. If only mismatched in color, the defect may only injure the appearance, while the sight may be perfect; but when one eye is smaller than its fellow it points to disease of the eye itself.
5. The wall eye. This is light colored, and although perfect as an organ of vision, is to be condemned on account of its ugliness.

cs, one of whom is L. W. Herchmer, and the local veterinarians of the N. W. T. After tracing some of these outbreaks to their origin, Mr Thompson strongly warns farmers against buying from these imported bands, as but for them glanders could soon be stamped out in Manitoba. Veterinary inspection of incoming bands is only a slight safeguard, as the germs of the disease may easily be there without observable symptoms.

On the nature of the disease, Mr. Thompson thus writes:—

“Among horses glanders is the principal contagious disease with which I have to deal. It is caused by a germ or bacillus called bacillus mallei, and is only spread by contagion. Yet horses suffering from strangles, catarrh, or other debilitating diseases, are more liable to contagion than healthy horses. For this reason it is sometimes supposed to come from such other diseases.

“In the horse glanders is a disease that may lie dormant for months after infection and then develop slowly into an acute case, causing death in a few weeks. In chronic cases the animal may continue in

good condition for months, and in exceptional cases for years. In the great majority of cases there is little or no cough, and the breathing is not perceptibly affected till the disease is far advanced. The animal may discharge from one or both nostrils, but oftener from one, and that the left. Its temperature is but slightly affected, except in acute cases. The discharge varies in color and specific gravity, but is generally a dirty brown, adhering about the nostrils. Sometimes the discharge will sink in water, while in a short time after the discharge from the same horse will not sink, and as the discharge from the nose from other causes will often sink, it is not a reliable test for the disease.

"A horse, after discharging for a time, may suddenly begin to bleed from the nose, after which the discharge will almost, or entirely, cease for a week or two, when it will gradually begin again and continue to get more profuse till it again bleeds. This may continue for two or three months, or for years, and is the most dangerous form of the disease, as almost all signs of disease disappear for a short time after each bleeding spell, allowing the owner an opportunity to dispose of the animal to an unsuspecting purchaser, thus giving fresh opportunities of spreading the disease. There is little or no smell from the discharge. There is, almost invariably, a lump (enlarged submaxillary gland) between the jaws from the size of a hickory nut to a hen's egg, sometimes larger. These glands seldom or never can be caused to break and discharge pus, and are mostly on the side from which the nostril is discharging most freely. They are close to the jaw-bone, but not attached to it, except in rare cases.

"As the disease advances, ulcers may appear in the septum nasi, or membrane separating the nostrils. These may first appear as whitish pimples or blisters, but they soon break away, leaving ragged reddish ulcers, which continue to spread and deepen till they at times eat through the membrane. In chronic cases they sometimes heal, leaving a scar. The horse often has a slight discharge from the eye on the side of the head most affected. This discharge does not run down, but appears like dirt collected in the corner of the eye.

"Again, the disease may appear as farcy, or farcy may develop as the disease advances. When the disease breaks out in farcy buds (which mostly occur on the inside of the legs or along the belly, but may occur on any part of the body), which may be described as boils about the size of half a walnut. They break a short time after their appearance and discharge a bloody pus, after which they heal quickly, and others break out to such an extent that at times the legs swell to an enormous size and are covered with the sores, but this only occurs in exceptional cases.

"There are symptoms somewhat similar to glanders that are sometimes mistaken for it. I have often been called to animals suffering from strangles that had been mistaken for glanders, but the discharge from strangles is of a lighter color than the average discharge from glanders, and it does not adhere to the nostrils to the same extent. The enlargements between the jaws are larger, situated higher up near the larynx, and usually break and discharge a light colored pus, while, as I said before, the enlargement from glanders can seldom, if ever, be caused to break.

"Sometimes an ulcerated tooth will cause the submaxillary gland to enlarge, and discharge from one nostril something similar to glanders, and is more often mistaken for glanders than any other trouble. But with the ulcerated tooth we invariably have a very disagreeable smell — quite different from glanders. Then there may be a discharge caused by some foreign substance in the nostril, also injuries causing the bones to become affected, and from other reasons

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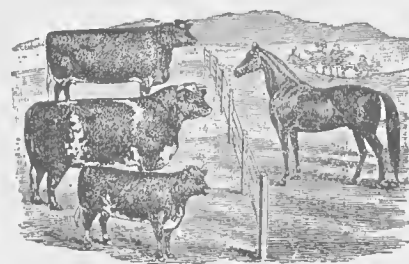


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D. HYSOP & SON, Box 492, Killarney, Man.

causing inflammation of the nose and sinuses."

Mr. Thompson then goes on to detail the way in which he, or any V. S. deputed by him, tests suspected horses with mallein, after which, if a case of glanders is found, the owner is ordered to burn or bury the carcass very deep, so that no dog or wolf can get at it.

Dr. Thompson's instructions for disinfection, after diseased horses have been destroyed, are:—

"To remove all stalls, mangers, racks, etc., and burn them along, with all the bedding and refuse. To thoroughly clean all halters, harness, neck-yokes, tongues of vehicles, and everything, in short, with which the diseased animal has come in contact. To thoroughly wash the walls of the stables with strong hot lye, then white-wash with one-half pound of crude carbolic acid to two gallons of the wash, repeating the same process in a month. Unless this is done, the contagion may stay in the wood-work for three or four years."

Corn vs. Oats for Horses.

The Farmer would like to call the attention of farmers to a little matter about the feeding of their horses during the hard spring work. What we have to say refers

Good draft horses do not fluctuate much in value, and one can calculate with some degree of certainty upon the outcome of his work when breeding them.

If you persist in breeding trotters, breed them of good size. If they do not prove to be record breakers, they will at least be good roadsters, and as such are always saleable.

The Regina Agricultural Society will hold a show of stallions on Friday, April 28th. Diplomas will be awarded to heavy draft, general purpose and standard bred stallions.

A syndicate of Neepawa horsemen have imported the standard bred stallion Pliny. He is a beautiful horse, dark brown, clean limbed, tractable, stands 16½ hands high and weighs about 1,300 lbs. His sire is General Stanton and his dam is Roxy.

Some of the ablest American horse importers allege that in horse inspection, as in some other things, French Government inspection is corrupt and unreliable. The man with choice wine or political influence can always get his horses a liberal chance of filling the inspector's requirements.

The horse is quick to take advantage of the ignorance or fear of those who control him. As compared with the dog he is somewhat slow of comprehension, but he

CATTLE.

The Dairy Cow, and Other Kinds of Cows.

A Paper read at the Live Stock Conventions by Jas Glennie, Arden, Man.

In dealing with this subject, it is not my intention to claim superiority for any particular breed for special dairy work, but to point out where and under what conditions I think the special dairy cow can best be used as a contributor to the wealth and prosperity of our country.

We know that by careful selection and breeding we can combine the production of milk and beef to a limited extent. The milking and beefing qualities can be so balanced in the same animal, that any attempt to improve the one will result in a falling back of the other. We know that we can produce what is understood as a general purpose horse, one that can move at a good gait when loaded light, and draw a load when required to do so; but we will never be able to produce one that will do the work required of our heavy draft horses, and be able to travel 100 miles a day, jumping ditches as he goes along.

I think our cattle may be divided into



View on the Farm of D. Hysop & Son, Killarney, Man.

more particularly to the new horses brought into the province this spring. In past years there has been a big difference in the way these horses have stood the work, Ontario horses generally standing the work better than American ones. The secret of the matter probably lies in the fact that Ontario horses are brought up and work on a grain ration composed almost entirely of oats, while the American horse, from the great corn-growing States, gets corn as the largest proportion of his grain. When the corn-fed horse is put on an oat ration he does not do so well, because not accustomed to this feed, and also because he has not the muscular power—the staying power—of the oat grown and fed horse, though he may be the nicer and sleeker looking animal of the two. Farmers will do well to remember where their new purchases have come from, and secure for those that have likely been raised to the south of us, a little corn, to form at least part of their ration, until they become somewhat accustomed to the ration of all oats. A little thought and care along these lines will mean a saving in flesh and more satisfaction in the amount of work accomplished.

It costs no more to raise a good colt than it does to raise a good steer or heifer, and no more to keep a good brood mare than a cow. The colt at two or three years of age will bring two or three times the price of the steer or heifer.

differs from the dog in this also—that he seldom becomes "too old to learn new tricks," and his memory is so retentive that he never forgets what he has once thoroughly learned. It may also be set down as a rule, with but few exceptions, that he means to do right; if he errs it is either from ignorance, pain, or fright; rarely from stubbornness or vice. This seems to be generally unknown, or at least disregarded, for of all the animals the horse is the least understood, the most harshly judged and unjustly treated; and thus for the least infraction of discipline is too often brutally punished.

Most breeders have no idea of how little money it costs the French breeder to command the services of a stallion of high class. Here is a sample: The stallion depot for the Department of La Gironde is at Libourne and the stallions centralized there are during the season distributed over the department, standing at various points as may best suit the convenience of the owners of mares. At Lesparre the following stallions will stand at the following fees:—Monbran, Thoroughbred, \$4, and \$1.25 to the groom; Baretous, Anglo-Arab, \$1.25; Troupac, trotter, \$1.25; Rip-Rap, trotter, \$2; Risque-a-Tout, trotter, \$2; Pedestal, trotter, \$1.25; Quia, trotter, \$1.25. At quite a number of points in this district really high-bred trotters are standing at what seems the ridiculously low fee of \$1—five francs.

three classes: Special purpose beef, special purpose dairy, and what is understood as general purpose. It is not very easy to define the latter. She is a sort of a go-between, culled out from both the other classes. To prove this it is only necessary to place her in the show-ring in competition with the modern Shorthorn of the most improved type. There her chances of winning a prize would be slim; while her chances would be equally slim in competition with the dairy classes, as there, anything approaching the beef type or a tendency to lay on fat is a serious defect in the eyes of a good judge of dairy cattle.

I spoke of three classes, but I hope my hearers who are breeders of Shorthorns will not take offence if I add a fourth. The first pure bred cow I owned was a Shorthorn which I bought at Bow Park, Ontario. She was four years old, was not giving milk, but was said to be four months gone in calf. I kept that cow three years, and during that time I did not get a calf from her, nor a drop of milk. She cost me 15 cents a pound live weight, I sold her for beef at six cents. She was a special purpose cow, but her purpose seemed to be to eat food and give nothing in return. Such cases are quite common among the beef breeds, but rare among the dairy breeds.

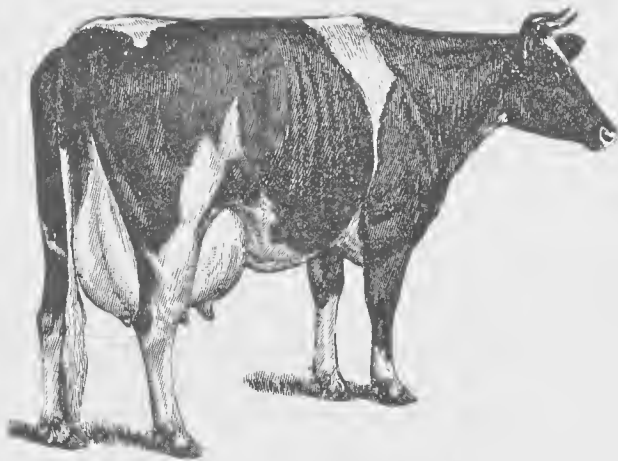
The place for the special purpose beef cow is undoubtedly the western range, where she can gather her food for most

of the year, and where she is only required to raise her own calf. She grows up in dread of man and can only be approached on horseback. If milk is required a cow is lassoed, tied head and legs to the corral. She learns to look on man as her enemy, as she shivers and too often freezes to death in the blizzards of our western plains. She may also have a place with the stock-raiser of Manitoba, when there is abundance of free pasture for summer, and hay in plenty for winter food. All she has to do to pay for her food is to raise a calf that when weaned will be worth perhaps \$10 or \$12. She must be provided with some kind of shelter for the winter. This is generally an open shed to which she retires at night, to hunt for a smooth spot to repose, among the frozen lumps of excrement. Her lot may not be so hard as that of her sister of the western plains, but she cannot know much comfort during the long, dreary, cold winter. Having suckled her calf for four or five months she feels that her season's work is done, her milk fountain dries up and her owner's family have to be content to spread their bread with stale butter and eat their porridge with "black strap" for the rest of the year.

The general purpose cow, so called, is supposed to be a Shorthorn or cross of that breed. I have never heard of the

77 of the last issue of The Nor'-West Farmer. From what little knowledge of cattle I have in general, I think I would not be afraid to place a steer, the get of an average Holstein sire in the show-ring, in competition with one the get of "Cecil Palmer." Bell 2nd is a true type of a dairy cow, and would pay for her food in milk product alone, and this is the only true test of a dairy cow. But she is not the stamp of Shorthorn that is being boomed to-day. Mary Abbotsburn the 7th is the kind and if she were brought down to rock-bottom beef price, she would not pay her way on the average Manitoba farm, where her food would have to be produced by cultivation. As I have already mentioned, her place is on the ranch, where she can be fed for \$10 a year or less.

We often hear it said that the most profitable cow is the one that gives a fair amount of milk, can be easily turned into beef if necessary to do so, and whose calf if a male, will grow into a good beef steer. This is very indefinite. The fact is, the most profitable cow is the one that gives the most value in product, for the amount of food consumed, no matter what that product may be. But I do not believe there is that difference in the beefing qualities of some of the breeds, that many suppose there is. No doubt, as an all-



Holstein Cow, Daisy Teake's Queen 2nd,

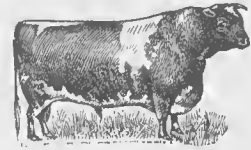
Winner of 1st Prize and Sweepstakes Female of the breed, also Special 1st Prize as best Dairy Cow any pure breed, Winnipeg Industrial Exhibition, 1898. Record: 72.25 lbs. milk in one day on fair ground, and 2.62 lbs. butter, 80 per cent. butter-fat. Owned by James Glennie, Arden, Man.

dual quality being claimed for the other recognized beef breeds. She enjoys more of the comforts of civilized life than the others. Her place is on the farm, where a few head are kept to supply the family with milk and butter, and a surplus to trade off at the country store. She must learn to suit herself to many changed conditions. She is milked early one day and late the next, and if it is a busy time and she has wandered far from home, it is not supposed to hurt her to hold her milk till morning. This is the kind of treatment the average farmer's cow receives throughout the country and it seems to me it is those who handle their stock in this way who have no faith in the dairy cow. We occasionally hear of big yields of milk and butter by a few cows that have been gathered together by careful selection, and that those cows have produced calves that have grown up into first-class beef steers. But what about the heifers from the same sire? Can they be depended on to equal, much less excel, their dams? But we are told that such cows must be bred to a Shorthorn of a milking strain. Just so, and if this is continued, we may produce a class of cattle upon a Shorthorn foundation that will rank with our dairy cattle of to-day. But what of their beefing qualities? In answer to this it is only necessary to look at pages 76 and

round beef breed, the Shorthorn is king, and if the milk tests of recent years count for anything, I think it may fairly be claimed that the Holstein is queen. Among the dairy breeds it is well known that the Holstein cow produces the heaviest calf at birth of any breed in the world. It maintains its superiority for several months, and in actual tests at some of our experimental stations, the Holstein steer has held his own fairly well.

At a test at the Experimental Farm, Guelph, some years ago, as to cost of production and quality of beef, a Holstein steer stood third, being beaten by a Shorthorn and Polled Angus, but beating the Hereford; while at Chicago's Fat Stock Shows, Holstein steers have come well to the front. A cross-bred Holstein, black and white, brought the top price in Chicago recently. It is claimed that the quality of the beef is not so good, hence not as suitable for shipment to the English market. But we should remember that the taste of the Englishman is as liable to change in regard to his beef as it has in his pork. A few years ago, Berkshire pork, bacon or ham suited his taste. Later he took a liking for the long and lank sides of the Yorkshire, and now they are not right unless crossed with the razor-back tooth-pick style. It is quite probable that before long English butchers will

Marchmont Stock Farm.



SCOTCH-BRED

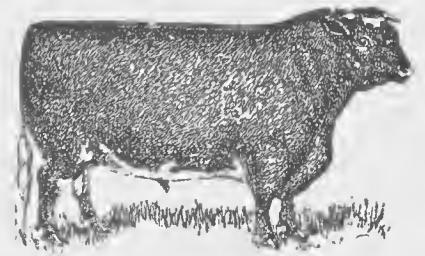
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W. S. LISTER, Middlechurch P. O.,
(7 miles North of Winnipeg.)

J. E. SMITH.



J. E. Smith has for sale a number of the very choicest Clydesdale Stallions and Mares, Shorthorn and Hereford Bulls, Shorthorn Cows and Heifers. All animals registered. Stock right. Prices right and no reserve.

J. E. SMITH, Box 274, Brandon, Man.

PIONEER HERD OF SHORTHORNS



I have been breeding Shorthorn Cattle right here for over a quarter of a century. I breed my own Show Cattle, and last year had at the Winnipeg Industrial the Gold Medal Herd. First for Bull and two of his get, and first for Cow and two of her progeny. I usually have stuff for sale, and am always pleased to show it.

WALTER LYNCH, Westbourne, Man.

PLAIN VIEW STOCK FARM

PORTAGE LA PRAIRIE, MAN.



The home of Shorthorns, Cotswolds and Berkshires. Watch this stock for something good.

F. W. BROWN, Prop.

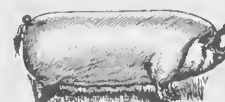
PURE BRED AYRSHIRE CATTLE.

Imported from Scotland, of the very best prize winning milking families, possessing large size, robust constitution, beautiful udders and large teats. Gold Medal herd from 1893 to 1897 at leading Canadian shows. Great prize record. Not been exhibited since. Choice Tamworth Swine—The bacon pig of the day. Stock all from noted prize-winners. Choice Collie Dogs—Imported and home bred. Won all leading prizes in Canada up to 1897, also second at New York Bench Show in 1897.

Stock all ages for sale.

R. G. STEACY, Importer and Breeder,
1876 Box 720, BROCKVILLE, ONT.

OAK GROVE FARM.



SHORTHORN CATTLE
and
LARGE, IMPROVED
YORKSHIRE SWINE

Orders booked now for Young Pigs. Among the Shorthorns recently imported from Ontario, I have for sale the 15 months old bull, Lord Lottie, and a few very fine heifers.

Timothy Seed.—A large quantity of pure, clean, timothy seed for sale.

JAS. BRAY,
Longburn, Man.

leave the tails of their beeves attached, unskinned, to the carcass, to show their customers that they are getting the genuine black and white.

It is necessary that we produce milk, butter and cheese, as well as beef, but it is not necessary that we produce all on the same farm, or in the same locality. I think it can be easily shown that the best results can be got by making a speciality of each under different conditions and in different localities. We will suppose two farmers, living side by side, each keeping a certain number of cows, for convenience we will call them Shorthorn grades. They work along in the "general purpose" way. Neither of them gets enough milk to pay them to use a cream separator. They work along making 10c. butter during the summer months, the product of the average cow not exceeding \$25 a year in butter, milk and calf. Now, if these farmers would divide up, one taking the good dairy cows, and the other one, the other kind, the one feeding and breeding for milk only, selling his calves when weaned to the beef raising farmer and turning all the cattle food grown on the farm into milk. And then again, if the dairy farmers could be grouped into localities, there would be a likelihood of creamery and cheese factories being carried on successfully.

I see in the report of one of our creameries the amount of butter manufactured during the season was a little over 11,000 lbs. This amount could have been produced by 100 good cows. Their food could have been grown on a quarter section of land or less, or they could have been distributed within the limits of an ordinary school district. Instead of this the cream wagons had to travel a distance of 10 and 12 miles from the factory collecting the cream in dribbles.

There are few farmers who know what a specially bred and properly fed cow will do, and few who have the courage to feed so as to get the best results. Perhaps one of the best producing dairy herds in the Dominion is owned by E. D. Tilson, of Tilsonburg, Ont. He states that 15 years ago he began using a Holstein bull on the best lot of Shorthorn cows he ever saw. Some of our Shorthorn men would say that anyone doing such a thing was fit for a lunatic asylum. He has now a herd of over fifty cows that averaged during the past year over 11,000 lbs. of milk, averaging 3.5 per cent. of fat, making 470 lbs. of butter. It would take the average beef producing cow, that only suckles her calf, a lifetime to produce an equal value to this, allowing her calf to be worth \$12 when weaned. One of the cows in this herd has in the last four years given 62,800 lbs. of milk, making 2,600 lbs. of butter. I mention this to show what the special bred dairy cow can do.

At a recent meeting of Shorthorn breeders held in Toronto, one of the speakers, waxing enthusiastic, said, "The people of the west have been running after false gods," breeding from Herefords, Angus, Galloways and other breeds." He advised making a big display of Shorthorns at Winnipeg, and he had no doubt the people would soon give up "those false doctrines."

We have no difficulty in testing the capabilities of our dairy cattle and finding out whether they are being kept at a profit or not, and I think it is the duty of the importers and breeders of the Shorthorns and other beef breeds to show under what conditions and management those cattle can be handled profitably on the average Manitoba farm. A prominent Ontario breeder said at a Farmers' Institute meeting recently, that he believed 25 per cent. of their export cattle were produced at a loss, and he doubted, if it were not for the absolute necessity of consuming rough food and making manure, if beef cattle

could be produced at a profit even at 5c. a lb., and if this is the case in Ontario, I don't see how they can be produced on the cultivated farms of this country at a price which must always be from 1c. to a cent below the Ontario value.

The special bred dairy cow solves the problem. She will pay her way on high price land and raise its value still higher. One hundred pounds of her product in butter can be produced at from \$8 to \$10, sells at \$16 to \$20 and draws on the land to the value of about 2 1/2 c.; 100 lbs. of beef costs about \$6, sells for about the same and robs the land to the value of 60c. Need any more be said as to the place the dairy cow should occupy on the Manitoba farm?

A Chance for Small Breeders.

One of the most important practical suggestions we have heard of for some time was made by F. W. Hodson at a recent meeting of stockmen held in Toronto. Success in pure breeding is not altogether a question of actual merit. It was only after the Scottish breeders had been forced to sell at moderate prices on this side of the Atlantic and find here the appreciation that was so long deferred nearer home that anything like full justice was done to their work. There can only be one Anthony Cruickshanks, but there are in Ontario, and



Lord Lossie

Fifteen months old Shorthorn bull, bred by J. Smith, of Maple Lodge, Ont., sired by Caithness, dam Lovely Queen 16th, imported and owned by Jas. Bray, of Longburn, Man.

will, we trust, soon be here in the west, a good many men to whose work as breeders the test of time alone can do justice. A name is half the battle when breeding stock comes to be sold, and not infrequently the man who has earned such a name often can get a third more money for a beast raised by one of his less heard of brethren than its own breeder could get. Mr. Hodson's idea is that the time has now come when, to do justice to these smaller breeders, a system of annual sales should be started, at which a man, who has been able to breed only a few good things, could get a fair chance to sell them for a good deal more than he would ever get at home. Such an arrangement would not entirely settle the difficulty. The big men would still have the pull and most likely might deserve it, but a sale, open to all, would give each man a chance, and such a scheme cannot be too soon set on foot.

It would not be the sellers only that such an arrangement would benefit. We westerners will for years to come want far more pure bred stock than can be raised at home. We will, in fact, need to look to the east for a good many of the animals, both male and female, with which to start herds here. With a few hundred animals collected at such central points as Guelph, London and Toronto, in the west, and other points in the east, at the season most suitable for both buyers and sellers, a scheme of auction sales could be arranged for, at which the stock of plain John Thomson would have

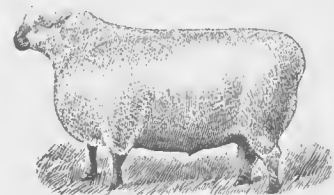
J. A. S. MACMILLAN

IMPORTER OF

Clydesdale, Shire and Hackney STALLIONS,

Has a few choice ones for sale; also

Pure Bred Shropshire Sheep.



Rams and ewes from the most fashionable imported blood. Inspection invited. For full particulars apply

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Box 483, BRANDON, MAN.

Prairie Home Stock Farm,

CRYSTAL CITY, MAN.



**Shorthorn and Ayrshire Cattle.
Shropshire Sheep.**

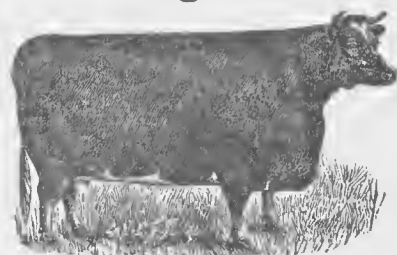
Yorkshire and Berkshire Swine.

Address all communications to JAS. YULE, Mgr.

2260

THOS. GREENWAY, PROP.

Choice Young Bulls for Sale.



Sired by TOPSMAN, the champion Shorthorn Bull at Winnipeg in 1897, and STANLEY 6th.

Anyone wishing to obtain a bull possessing individual merit and of high breeding can make no mistake in writing

J. G. BARRON, Carberry, Man.

F. TORRANCE, VETERINARY SURGEON

Graduate of McGill University. Diseases of animals treated scientifically. Surgical and dental operations a specialty.

Office: 214 James St., Winnipeg.
Telephone 295.

HOPE FARM,

ST. JEAN BAPTISTE, MAN.

Headquarters for GALLOWAY CATTLE.

Apply to T. M. CAMPBELL, Mgr.

Five Bulls for Sale.

THREE SHORTHORN, one 2-year-old, in splendid shape; two fine yearlings, fit for service.

TWO POLLED ANGUS, best blood. Pedigrees furnished with all animals.

G. B. MURPHY, Box 2, Carberry, Man.

exactly the same chance as that of the Hon. John Dryden, of selling in open day on its merits.

This system of open show and auction sale has been carried on successfully in Britain, where sometimes half a dozen are going on at the same time, as is done at Kelso each fall. There 1,800 rams are sold singly in one day, and buyers from long distances assemble. The proprietors of the leading auction marts hold both a show and sale, and the prize-winners of the morning are put through the sale ring in the afternoon. At these sales the order of sale is settled by lot, and the most wealthy land owner may get a worse position in the order of sale than has fallen to his tenant or poor neighbor. Men of all ranks socially meet in the sale ring on equal terms, and hundreds of cattle and sheep for breeding purposes are regularly sold all over Britain in this way. The rapid expansion of this system of public sale is the surest proof of its usefulness and popularity.

The cattle meant for sale at such marts are not "fitted" the same way perhaps as showyard cattle, and are all the better for it. Breeding quality is the article in request, and the previous feeding and treatment is carried through with an eye to that result mainly. As time rolls on the ever-vigilant buyers compare notes and find that the stock from certain farms are better 'doers' than more showy ones in the sale ring, and prices rule accordingly. This method of sale, so popular and now regarded as almost indispensable in the old country, we want introduced in Canada, and it is well that the idea has been put before the public. It should be put in practice with all convenient speed. For cattle the spring season seems much better than at the date of the summer shows, and next spring may see the scheme fully launched.

We here in the west, instead of peddling all round the country looking at herds, big and little, could in one week see and select from the whole saleable stock in the country, and with the present scale of charges for registered stock, could collect perhaps half a train load in time to be brought here and distributed at a maximum of convenience with a minimum of expense for handling. In the name of the rank and file of the western buyers and breeders of pedigree live stock, we strongly endorse the method suggested by Mr. Hodson and hope that another spring season will not be allowed to pass before a vigorous start is made along the old country lines, or, at least, so far on those lines as is suitable to Canadian conditions.

Stray Cattle.

The other day, at Carman, Justice of the Peace Pritchard gave a decision that is worth noting. A heifer belonging to Mrs. Burke joined the herd of Peter Robertson a year ago. She paid Robertson \$5, but he wanted \$10, and held the beast. She afterwards sold the heifer and took it away from Robertson, who then replevined and brought it back, charging Mrs. Burke with wrongfully taking it away. The magistrate dismissed the case with \$8 costs against Robertson, but awarded him \$4 for the keep of the heifer. He held that no one has a right to hold stray stock without advertising for its real owner. Whatever may be the exact law of the case, this decision seems based on common sense and justice.

The Farmer has been asked by the secretary of the Pure Bred Cattle Breeders' Association to make the following correction: "In the list of expert judges of beef breeds of cattle recommended by the Pure Bred Cattle Breeders' Association, and published in April 5th issue, the name of F.W. Brown, Portage la Prairie, was omitted."

Where the Profit Comes In.

A writer in the Breeders' Gazette, describing the feeding of a car of 2-year-old steers he had sold at \$5.80, says. "The farmers think the Shorthorns are the best all-round breed, and they are good enough for me if they are well kept when young; but the trouble is with a good many calf-raisers they want to keep them too much in winter and spring on wind and water. I would like you to tell the calf-raisers not to be afraid to feed the calf. One steer, a red Shorthorn, in the load I shipped, sucked the cow about six months and weighed 500 lbs. when I bought him at four cents per pound. He was fed after that with the others till he was twenty-two months old and weighed 1,475 lbs. and was the best killer in the load. I do not raise any calves, but I try to get my neighbor farmers to keep their calves and young cattle in good thrifty condition."

The man who has a nice bunch of cattle, and who has looked after them well during the winter, can now afford to wear a good broad grin, for cattle are worth money. He has cattle to sell instead of to buy. Stay with the stock.

Owing to improved times many American, as well as Canadian, farmers are investing in pure bred stock. The demand has been so great that good breeding stock is scarce. The probability is that a large number of American buyers will cross the Atlantic to purchase stock to replenish their herds. A scarcity of good breeding stock also prevails in Canada, and it is expected that more than the usual number will be imported from Great Britain this summer.

We clip the following from a western exchange: A firm of Regina butchers last fall sold a 2½-year-old heifer, 705 lbs., live weight, to a farmer at 2½c. per pound. She was to be sold back to them at Easter for 4c., and when killed weighed 1,135 lbs. The difference between the selling price, \$17.62, and the killing value, \$45.40, made \$27.78 for the winter's keep, a pretty plain lesson on where the profit on cattle raising comes in.

A well-known Winnipeg dairyman has stated that he had lost three fine calves by tuberculosis, solely, as he believes, through feeding them milk from a tuberculous cow. Alongside of that we quote from the experience of an Ayrshire breeder, as given in The Scottish Farmer. He had a 6-year-old cow that gave signs of premature calving, and did calve six weeks before her time. The calf lived, was fed on her milk and did well. The cow soon pined away and was killed. Postmortem showed tubercles on her lungs like bunches of grapes. The calf was sold as a 3-year-old when herself in calf, as the owner thought her a dangerous subject to keep. She is now 9 years old and the hardest looking cow in her owner's stable.

"Holstein-Friesian Cattle" is the title of a most interesting work prepared and issued by Fred. L. Houghton, the able editor of the Holstein-Friesian Register and the secretary of the American Holstein-Friesian Association, Brattleboro, Vt. The author traces the history of these cattle from early times to the present day. He tells how the breed was developed and of the great quantities of milk given and its richness. Interesting chapters are given on breeding, feeding, handling and showing Holstein cattle. To read the book is to want to have a herd of these cattle. The book contains numerous illustrations of famous animals, a short history of a great many successful breeders and a very complete list of butter and milk records. It is a valuable addition to our literature on Holstein cattle.

EVERY STABLE REQUISITE

Correspond with us if you require new or second-hand Carriages or Buggies of any description. New or second-hand single or double Driving or Work HARNESS, SADDLES, BRIDLES, RUGS, ROBES, BLANKETS, etc.

We have the largest and oldest-established Horse Market in Canada. Auction sales every Tuesday and Friday throughout the year. Private sales every day. Consignments solicited. Special terms made for car-loads.

WALTER HARLAND SMITH,

AGENTS AND PROPRIETOR,

"Grand's Repository," Toronto, Canada.

Established 1858.

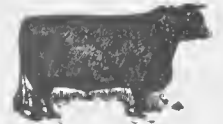
D. McBETH, OAK LAKE, MAN.

BREEDER OF

CLYDESDALE HORSES



AND
SHORTHORN CATTLE.



I have a number of promising young Stallions for sale.

My Shorthorn herd is headed by "Best Yet," bred by Hon John Dryden, of Brooklin, Ontario. A number of young stock of both sexes, all registered, are for sale, and can be recommended as first-class animals.

Correspondence solicited. Prices right.

R. REED-BYERLEY, Cook's Creek, Man., breeder and importer of Clydesdales. Headed by Gem Prince, sired by Cedric. Correspondence solicited.

FOR

HEREFORDS

CALL ON OR WRITE TO

J. E. MARPLES,

Poplar Grove Farm, Deleau, Man.
(Pipestone Branch C.P.R.)

J. C. & A. W. FLEMING, PILOT MOUND, MAN.

Breeders of Cotswold Sheep, Poland China Pigs, Barred Rocks, and other breeds of poultry.

Growers of all the best varieties of POTATOES. Seed for sale.

Send for Catalogue, and mention this paper.

English Berkshires—B.P. Rocks.

FOR SALE.

A litter of 11 farrowed in December, exceptionally well marked and good length. Another litter farrowed end of February, and a litter in March from Melody 19th (imp.). These are grand pigs.

JOHN LAHMER, Carrville P.O., Ont.
Station & Telegraph Office—Richmond Hill, G.T.R.

W. L. TRANN, CRYSTAL CITY, MAN.

"BOUNDARY STOCK FARM,"

Breeder and Importer of

POLAND CHINA PIGS,

Finest breeding pairs not akin. Some fine young boars for sale for spring use, also young brood sows. Also several young Light Brahma Cockerels for sale.

WALNUT GROVE SHORTHORNS.

We are offering five Bulls from 7 mos. to 2 yrs. of age. Stock Bulls (imp.) Warfare (56712) and (imp.) Royal George (17106), and Centennial Isabella, Scotland Yet (23375), also a few Heifers.

A. & D. BROWN, Iona, Ont.

50 REGISTERED BROOD SOWS

For sale in Berkshires, Yorkshires and Tamworths. A fine lot. Many to farrow in May and June. Also some nice Boars. Close prices.

Caldwell Bros, Grand View Hotel, Dauphin, Man.

SHEEP.**A Lamb Creep.**

It is always difficult to give growing lambs, that it is desirable to push along for either show purposes or for market, extra grain without the ewes getting a share of it, and possibly the biggest share. It is most easily accomplished by making what is called a lamb creep. Make a small pen, in one corner of the sheep house. In this put a trough for holding meal. Make the opening into this plenty large enough for the lambs to go through, but too small for the ewes. Coax the lambs to eat oat chop, bran, or a mixture of the two. Keep a little meal in the trough for them to nibble at and they will not be long in learning to eat quite a lot of it. Keep it fresh for them, and don't put in much until they learn to eat. Then they should have a regular allowance, three times a day, removing any that has been left over before another lot is fed, so as to keep it fresh and clean. In this way the lambs can soon be taught to eat considerable meal. By frequent feeding the amount of meal eaten can be increased to the highest amount. They will only eat a very small quantity at first, but will soon begin to look for it quite eagerly. Prof. Craig found in his experiments at Wisconsin that a lamb 8 weeks old would eat about 0.17 pound of grain daily; when 10 weeks old, about 0.25 pound, and when 12 weeks old, about 0.5 pound.

The best grain for young lambs is a mixture of equal parts, by weight, of oats, bran and linseed meal. Lambs are fond of oats, but do not eat them as freely as other foods, and if the oats are ground, will leave the hulls. Bran is a safe food, and can be fed in large quantities without any danger. Bran is, in fact, the safest of all stock foods. The linseed meal makes a good addition, being rich and concentrated.

When the sheep are out to pasture, a similar creep can be made in the field and grain placed there for them so that they will get it. They will always turn up at feeding time if feed is placed there regularly for them. By keeping up the grain lambs can be forced right along and hardly miss their mothers at weaning time.

If a young lamb is chilled, it can be warmed by dipping or holding for a short time in warm water, but care must be taken to leave some part of its head or shoulders out, so that the mother may recognize her lamb, as scent and not sight settles this important question for the first few days. If the lamb is wrapped in an old cloth, and all but the nose buried in the heating horse manure pile, it is less apt to chill afterwards and also less apt to lose the scent than if put in hot water.

When a ewe has lambed, it is always well to see that all wool and filth are cleaned away from the teats, so that the lamb has ready access to them and will not be prevented from sucking. This is especially necessary in the case with young ewes. If the lamb is not able, of its own accord, to obtain the ewe's milk, it should be assisted in doing so. Examine the udder, draw some of the milk to see that it escapes freely, and then hold the lamb so that it may reach the teat. Some shepherds recommend throwing the ewe if the lamb is too weak to stand. A better plan is to drow some of the milk and feed it from a teaspoon. If fed a teaspoonful every hour for a half day or so most weak lambs will be strong enough to get at the teat themselves. If possible, the ewe and her lamb should be kept in a pen by themselves for at least three days. It gives the lamb a chance to gain strength to run around.

Feeding Lambs by Hand.

When a lamb has to be raised by hand it is a mistake to feed too much at a time, but hardly any mistake can be made in feeding too often. Milk from a fresh cow is better than one that has been in milk for a long time. The handiest way to give milk is from a bottle with a rubber nipple. By getting a glass Y tube and putting rubber nipples on each fork, two can be fed at once. A newly-dropped lamb only requires two teaspoonfuls at a time given every hour. It should be fed at blood heat. The lambs seem to like it warm, and for best results it should be fed warm, as that is the way they get it from their mothers. Some sheepmen think it necessary to dilute the milk with a little water and then add a little sugar. Experiments along this line show that this is not necessary. There is more to be gained by warming the milk and by regular feeding. The bottle and nipple must be kept absolutely clean and free from sour milk or the lamb will refuse it. As the lambs grow they will take more milk and can be fed less frequently. A lamb two months old should be able to take two pints of milk a day, given in two feeds. This is besides the grass eaten and any grain that may be fed.

Sheep eat no filth, and mutton is therefore the healthiest and cleanest of all flesh. They impart no scrofula or trichinae and its diseases are not hidden.

A writer in an American exchange recommends Angora goats as profitable stock to keep on a farm where there is much brush and weeds, as they seem to prefer weeds and leaves to grass.

The Americans are fast becoming a mutton-eating people. The sheep feeding industry, which began in a very small way 20 years ago, has developed until last winter there were 2,000,000 of them in the feed lot in the Middle and Western States being prepared for mutton.

John Kerr, of Montgomery district, wintered 28 ewes and raised therefrom 40 lambs, some of which he sold to Lidster & Kedwell for their Easter trade at \$4 each. The farmer who is only a mere speculator in wheat can afford to profit by this object lesson in stock raising.—Virden Advance.

Letter of Thanks.

Winnipeg, 31st March, 1899.

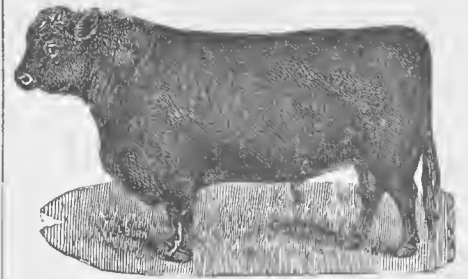
G. O. Woodman, Esq., Secretary-Manager, Northwest Fire Ins. Co., Winnipeg.

Dear Sir: I have to-day received cheque for \$200 in payment of my loss by fire of the 15th March, and wish to express my thanks to the Company for the prompt and liberal manner in which they have settled my claim.

Yours truly,

WM. COUTTS.

The manufacture of Bole's Condition Powder has become quite an important Manitoba industry. The consumption of this class of goods is very large and constantly growing, and Bole's Condition Powders appears to be heading the right way to control the market, not by buying up other concerns—as appears to be the fashion nowadays—but by putting on the market an article of real merit at a reasonable price. A good Condition Powder should be tonic, nutritive and slightly stimulating. These properties Bole's possess in the right degree. They are not temporarily helpful and permanently hurtful, but always good for horses, cattle, sheep and hogs. They are put up in one pound packages and sold at 25c. per package.



Galloways TWO CAR LOADS
Choice registered Cows and Heifers, and a few young Bulls, not akin, for sale.
D. McCRAE, Guelph, Ont.

TREDINNOCK HERD
OF
AYRSHIRES.



Winners at the leading fairs of 1898. Awarded at Toronto, London and Ottawa—16 firsts, two sweepstakes, silver medal and other prizes, in all numbering 84, among which were seven herd prizes, four being firsts, and first for four calves, bred and owned by exhibitor.

ROBERT REFORM, JAS. BODEN, Proprietor, Manager.
2458 ST. ANNE DE BELLEVUE, QUE.

HOLSTEINS and YORKSHIRES.

Gretqui Montgomery Prince, 3 years, dam Gretqui, (2nd at Toronto Dairy Test, 1895); diploma Bull at Brandon, 1898: one 5 months Bull Calif. Yorkshires for spring delivery. Prices reasonable.

A. B. POTTER, Montgomery, Assa.

JERSEY BULLS
FOR SALE.

I am now offering my stock Bull, BELVEDERE STOKES POGIS, for sale, also several young Bulls. Write for particulars.

WM. MURRAY,
2340 Dugald, Man.



Ridgewood Stock Farm, Souris, Man.

WM. SHARMAN,

BREEDER OF

High Class Herefords

A few early Bull Calves for sale.

Thorndale Stock Farm

JOHN S. ROBSON,
MANITOU, MAN.

Breeder of SHORTHORNS. Long established, reliable pedigrees; straight dealing always. Young stock of both sexes always on hand. Write early if you want them. 2185



JERSEY BULL FOR SALE.

No. 50202. 2 years old in February. Solid color, black tongue and switch. Took 1st prize in Winnipeg as calf.

H. R. KEYES, Midway, Man.

Stallions for Sale.

I am offering for sale the imported Clydesdale stallion "HARRY'S BOY" (5069, vol. 9), light bay, splendid stock getter; in shape for a good season. Also the roadster stallion "PETER SHERIDAN."

WM. MAXWELL, Moropano, Man.

COMBAULT'S is the only reliable and safe CAUSTIC BALSAM on the market. It is manufactured in France and guaranteed as represented.

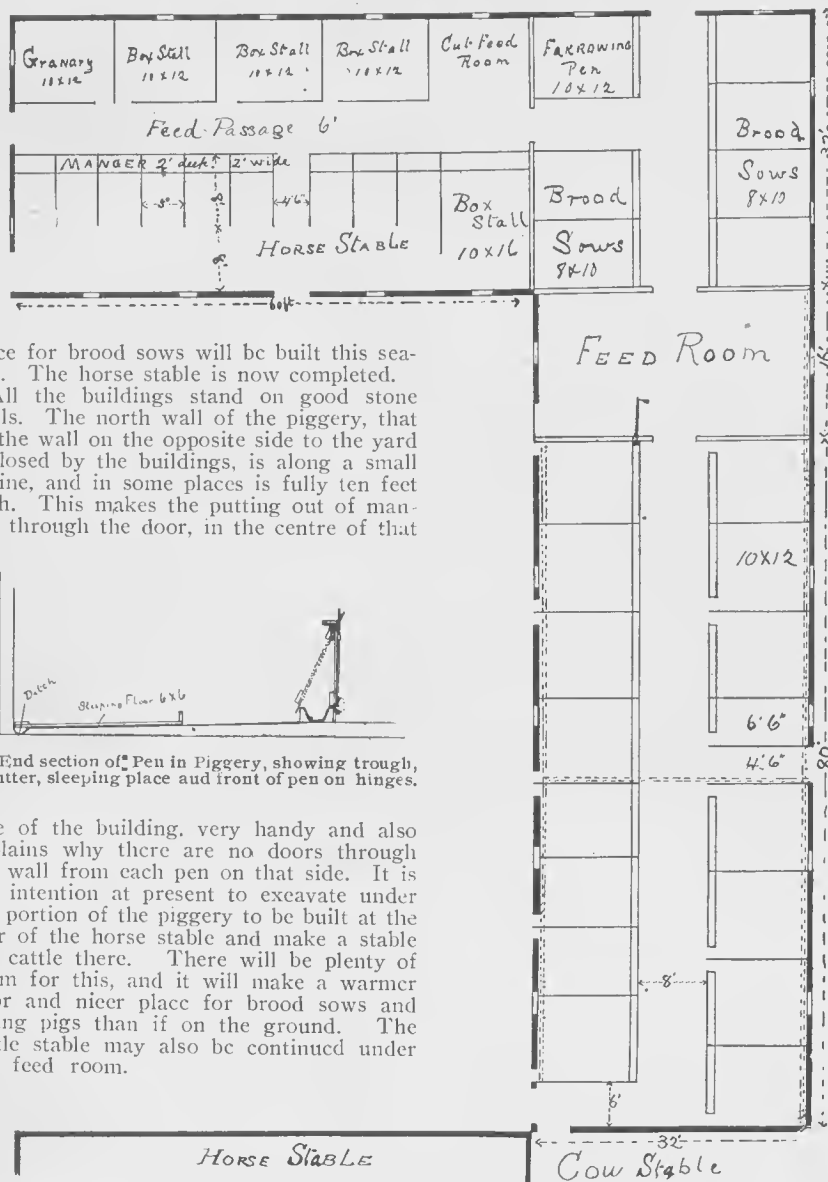
SWINE.

A Good Piggery.

We have pleasure in giving plans in this issue of the Hon. Thos. Greenway's new piggery and horse stable. The description of the piggery was given at the Live Stock conventions in February, and appeared in the convention number, page 110, so that a full explanation is not necessary here. The description given then only covered the portion of the building marked 80 feet. The portion marked for the feed room and the

it is desired to wash out the pen. The trough is made of cement, is 6 inches wide at the bottom, 10 inches at the top and about 6 inches deep. The front partitions are on hinges and swing in so that feed can be put into the troughs. The pens on the east side have no small doorways opening into the centre passage. If it is desired to change the pigs at all, the front of the pen is swung up a little higher than necessary for feeding.

The feed room will be fitted with bins for meal and bins for steaming feed. Steam will be supplied by underground pipes from a boiler in a house for killing pigs, situated to the west of the new horse stable. Water



place for brood sows will be built this season. The horse stable is now completed.

All the buildings stand on good stone walls. The north wall of the piggery, that is, the wall on the opposite side to the yard enclosed by the buildings, is along a small ravine, and in some places is fully ten feet high. This makes the putting out of manure through the door, in the centre of that



End section of Pen in Piggery, showing trough, gutter, sleeping place and front of pen on hinges.

side of the building, very handy and also explains why there are no doors through the wall from each pen on that side. It is the intention at present to excavate under the portion of the piggery to be built at the rear of the horse stable and make a stable for cattle there. There will be plenty of room for this, and it will make a warmer floor and nicer place for brood sows and young pigs than if on the ground. The cattle stable may also be continued under the feed room.

Plan of Hon. Thos. Greenway's new Piggery and Horse Stable, Crystal City, Man.
Showing divisions of pens and stalls.

The floor, in that portion of the piggery already built, is cement. At the rear of each pen, or along the wall, and shown by dotted lines in the illustration, is a gutter three inches deep. This slopes from each end to the centre, and a cross gutter, running under the centre passageway, carries any waste across to the north wall, where there is a free outlet and fall. It is hardly needed in general use, as there is sufficient bedding used to absorb all the liquid, but it is there if wanted, and will be useful in washing out the building. The floor of each pen has three inches fall from the feed trough to the gutter. A platform of plank, 6 feet square, is placed in one corner of each pen for the pigs to sleep on. It is not fastened down, but can be raised up when

pipes are laid along the top of the front of the south pens, and taps at various places allow water to be drawn quickly for feeding purposes or for washing the floors.

The horse stable hardly needs any comment. The floors in the box stalls will be earth and 2x4, scantling set on edge in the stalls, which are five feet wide. A windmill on the roof supplies power to run a cutting-box over the feed room.

The wall of the piggery is 14 feet, giving room for the storage of a large quantity of straw overhead. The wall of the horse stable is the same height. When completed these buildings will be very commodious and pleasant to work in. These, in addition to those already built, make them the most extensive farm buildings in the west.

WOODBINE FARM, CARBERRY, MAN.



AYRSHIRE CATTLE.

YORKSHIRE SWINE.

S. L. WYANDOTTES.

Am booking early orders for spring pigs, and can spare a few choice brood sows. The foundation stock of both swine and poultry is from imported stock. Birds properly mated at reasonable prices. Eggs \$2 per 13.—S. J. THOMPSON & SON, Box 28.

R. McLENNAN, Moropano P.O., Man.



Breeder and Importer of

SHORTHORN CATTLE.

I have on hand some fine young stock of both sexes for sale, including *Royal Duke* (24640), a dark red 3-year-old. Write for prices before purchasing elsewhere.

STALLION FOR SALE.

Imported thoroughbred Stallion, "*FRED DOUGLAS*," by Rosicrucian, dam Althotas, 6 years old, sound and all right. Price \$500.

Also five young thoroughbred mares, between 3 and 5 years old.

R. POWER, Box 186, Carberry, Man.

SHORTHORNS.

I have two first-class Bulls for sale between one year and a half and two years old; also a few Heifers (sired by "*Aberdeen*") rising two or nearly two years old, in calf to "*Crimson Knight*"—first prize Bull at Winnipeg last year. For particulars write—Wm. CHALMERS, Hayfield, Man.

AYRSHIRES.

A fine 4-year-old Cow, with 3-month Heifer Calf; two 3-year-old Cows, one with calf; one 2-year-old Heifer, and a fine large 16-month-old Bull. All imported. Bull not related. Price right.

A. MUTTER, Brandon, Man.

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Every bottle of Caustic Balsam sold is Warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address THE LAWRENCE-WILLIAMS CO., Cleveland, Ohio

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Green Crops for Pigs.

Considerable has been said at one time and another in our columns about green foods as summer pasture for pigs. Now is the time to put some of these ideas into practice. The first green stuff pigs can get will be Brome grass. They can't get that this spring, of course, but you can make preparation for next spring by sowing a piece of Brome grass this summer. Following this, a piece of early sown wheat will afford the next bite. It should be sown fairly thick and quite an acreage of it, as an acre will pasture only about ten hogs for the summer. But a smaller acreage of this would do if rape were sown to follow. A small plot of Dwarf Essex rape sown early in May will give an immense amount of green feed. It can be sown, either for the pigs to pasture off themselves, or to cut and feed to them in their yards. These helps to successful hog raising take a little time, to be sure, but they will well repay the time spent on them in increased returns. While on this subject we must not forget to point out that the list of green feeds is not complete until we count in some turnips or mangels for winter green feed. Don't forget this.

Feeding the Brood Sow.

Theodore Louis, Louisville, Wis., is a veteran hog raiser, and for many years has been a speaker on the Farmers' Institute staff of both Wisconsin and Minnesota. The following are some of his ideas on the brood sow and his method of feeding her: "The feeding of the brood sow when she is nursing her pigs is an art," he says. "But there are few men that realize this. The brood sow on my farm takes the place of a cow on a dairy farm. A brood sow will give as much milk during 24 hours as an average cow. Now, do not ask me if I have ever milked one.

"I have found a pair of scales and a lead pencil a better educator than ever I will be. When the litter of pigs is born, take them, four or five hours after they are born, put them on scales and you will find they will weigh from 12 to 18 lbs., according to size of the litter and age of the sow. Weigh these pigs every 24 hours and you will find that they will make a gain of from 2 to 5 lbs., according to the ability of the sow to give milk. I want my sows to be milk-givers because that is where the young pigs get their start in life. When feeding the sow we should feed her with an eye to milk production just as you would feed a cow for producing milk.

"In feeding the sow, one kind of feed never gives the same satisfaction that a variety will. My favorite feed for brood sows is shorts mixed. I prepare two parts of shorts and one part of cornmeal. I steam this and feed it warm, for I find my sows keep healthier on warm feed in cold weather than when it is fed cold. By way of a change, I add some barley meal to the mixture, and also a little linseed meal to keep the sow from becoming constipated. If the sow becomes constipated, it will cause the little pigs to become so, too. I throw a few handfuls of oats on the floor of the pen when I want to teach the little pigs to learn to eat. The sow picks them up and begins to chew them and the little fellows get their first lesson in eating."

Average weight of hogs received at Chicago for the past four months was fully 6 lbs. lighter than for the corresponding period a year ago.

Thos. I. Lokier, Glenella, Man., recently killed a hog, 9 months and 3 days old, that dressed 304½ lbs. He was of a litter of 14, and was a well-graded Berkshire.

A pretty reliable report comes from Tennessee of an ancient sow that lived to be at least 32 years old and had raised over 800 pigs. Her owners buried her and set up a limestone slab to commemorate her age and virtues. She was a Berkshire of good size.

When young pigs are about three weeks old they begin to eat a little. If they can get into the sow's trough they will begin to eat with her. It is a good plan to make a little trough for them and place it out of reach of the sow but where the little fellows can reach it easily. By feeding sweet skim-milk and a little middlings or chop, as they will take it, they can be shoved along, and when it comes to weaning time they will not fail, but go right on growing.

The J. Y. Griffin Co., Winnipeg, have issued a circular letter to the farmers of Manitoba on the growing of more hogs to supply the demands of our markets. We understand copies of this circular have been well distributed, and hope that farmers will have lots of hogs for sale this summer and fall. We would have them remember this about raising hogs, or rather about the marketing of them. The time to obtain the highest price for hogs is generally during August and September. Hogs are generally cheaper as the cold weather comes on and everyone is selling.

Toronto Horse Show.

The fifth Spring Horse Show was held at Toronto on April 13, 14 and 15, and was all through a special success. The weather was very fine and the attendance, which included Lord and Lady Minto, and the Hon. Sydney Fisher, was extra good. On Saturday, the closing day, the attractions, which ranged from a trained billy goat up to four-in-hands, were abundant and of first-rate quality. This show has been every way a success and has given great satisfaction to its promoters. The awards for the classes in which our readers will be most interested were as follows:—

Clydesdales.—Stallions foaled in 1896—1, R. Davies, Toronto, for Lyon McGregor (imp.); 2, J. Davidson, Ashburn, for Prince of Kinellar (imp.); 3, A. Doherty, Ellesmere, for Prince of Blantyre. Stallions foaled after 1st January, 1897—1, R. Davies, Toronto, for Prince of the Glen; 2, Graham Bros., Claremont, for Aberdeen; 3, Davies, Sweepstakes, best stallion, any age, imported or Canadian bred—1, Davies, Lyon McGregor.

Shires.—Stallions foaled previous to January 1, 1896—1, Colborne Shire Horse Co., for Mawdsley; 2, Morris, Stone and Wellington, for Prince of Hatfield.

Hackneys.—Stallions foaled after January 1, 1896—1, D. & O. Sorby, Guelph, for Woodlands Performer; 2 and 3, H. N. Crosley, Rousseau, for Rousseau Swell and Rousseau St. George. Sweepstakes—Stallion, any age, and stallion from an imported sire and dam—Graham Bros., for Lord Rosebery. Sweepstakes for mares, same conditions, went to R. Beith, Bowmanville, for Cordelia and Jessica.

Thoroughbreds.—Stallion, previous to January 1, 1896—1, Quinn Bros., Brantford, for Wiley Buckles; 2, W. Hendrie, Hamilton, for Othmar. Stallions, foaled during 1896—1, W. J. Thompson, Orkney, King Bob; 2, A. Frank & Son, The Grange, Terremont.

Carriage Horses.—Stallions, foaled previous to January 1, 1896, not less than 16 hands in height—1, James McCartney, Thamesford, Graf Bremer; 2, John Rodgers, Emery, General Watson; 3, J. Mannell, Toronto, Young Duke of Cleveland.

Standard-breds.—Stallions foaled previous to Jan. 1, 1896—Graham Bros., Claremont, Reflector; 2, Edmund Taylor, Toronto, Albioner; 3, Alex. Clark, Brinston's Corners, Alcyonium Boy.

There was also a splendid show of drivers, saddle horses and hunters.

Among the Breeders.

K. McIvor reports having sold two young Shorthorn bulls to D. J. McLean, Virden, and one to Wm. Sproat, Virden.

W. D. Flatt, Hamilton, Ont., in sending us a change of ad., says: "I appreciate The Nor'-West Farmer as an advertising medium. My sales for the past month number 27 head. My herd now numbers about 70. Amongst the lot I offer are a number of show animals."

John Traquair, Welwyn, Assa, writes:—"My cattle are coming through the winter well. We have quite a crop of calves already, and would like to have them out on the grass soon. A large number of stockers have been bought in this district; good prices have been paid. The most of the people seem to think it pays better to let them go than to keep them over."

Robert White, of Brookside Stock Farm, Wakopa, has sold, through his "ad." in The Nor'-West Farmer, as follows: To Sam Fargey, Belmont, 1 red yearling bull; to John Lawrence, Wakopa, a 10 months' old bull; to Alex. Stevenson, Wakopa, a 2-year-old heifer; to F. O. Fowler, Wawanesa, a 10 months' old bull. He has still a nice bull coming 2 years old that he will sell at a right price.

Some time ago we had the pleasure of a turn through W. E. Baldwin's stables at Manitou. Red Beauty, the calf whose great weight was reported some time ago, is a nice, smoothly turned heifer, and though hand-fed, is doing nicely at six months of age. She weighed 652 lbs. His Tamworth sow, Manitou Rose, first at Winnipeg last year, had just farrowed a fine litter of pigs. Village Duke, the young bull at the head of his herd, is developing nicely. He is a little over 13 months old, and promises to make a big one. A pair of yearling heifers are also doing well, and all his stock are in good condition.

F. W. Heubach, manager of the Winnipeg Industrial, has issued the following letter to live stock exhibitors.

"I beg to advise you that the railway companies have decided to make a charge for the carriage of exhibits to the fair. They have, however, decided to make this charge merely a nominal one for the present year, namely, 20 per cent. That is, one-fifth of the single fare for the double journey. The procedure by the exhibitor will be the same as the arrangement that has hitherto been in force. That is, the one-way fare will be collected when the exhibits are being shipped into Winnipeg, but 80 per cent. of this charge will be refunded the shipper on our certificate. The free return of unsold exhibits, from the fair to the original point of shipment, remains in effect."

The well-known Carberry horsemen, Messrs. Boyd & Power, have lately brought in the imported Hackney stallion "March Past." He is a splendid type of the Hackney horse, and has plenty of size, combined with extra quality. March Past is for sale, but if not sold, will stand in Carberry at a reasonable fee. The Chicago Horseman says of this horse: "March Past is an imported dark bay horse standing fully sixteen hands, a high-stepper and very good goer, and fast withal, for he can show miles in three minutes. In addition he is bred in the purple, being by White Stockings (415 Eng. register), from the famous Janie (1572). March Past, now ten years old, was imported in 1893 and made four seasons in Ogdensburg, N. Y. Several of his youngsters made high prices in New York, one selling for \$1,500, nearly a record price for an unbroken Hackney."



Answers to Questions.

By an Experienced Veterinarian.

As it is desired to make this column as interesting and valuable as possible to subscribers, advice is given in it free in answer to questions on veterinary matters. Enquiries must in all cases be accompanied by the name and address of the subscriber, but the name will not be published if so desired. Free answers are only given in our columns. Persons requiring answers sent them privately by mail must enclose a fee of \$1.50. All enquiries must be plainly written, and symptoms clearly but briefly set forth.

Verminous Bronchitis.

J. W. C., Miami, Man.: "Will you kindly inform me what is wrong with my pigs? First, they seem to cough and continue to get worse until they get off their feed. One died last Sunday, and upon opening it, looks to me to be inflammation of the lungs. They are in good condition. One pig, a year old and fat, has taken it. She is in pig. The others are last fall pigs. Is there anything I can do for them? I might say they have been fed on barley chop and water all winter. They last only ten days or two weeks from first taking it. Had 13 of them, and five more have it now. Have also ten young ones on sow. If they take it, can I do anything for them?"

Answer.—Your pigs show symptoms of verminous bronchitis, an inflammation of the bronchial tubes of the lungs, caused by the presence of minute worms in them. The next post mortem you make, examine carefully the froth and mucus in the air tubes of the lungs. You will probably find numbers of small white worms. Infection with these worms will spread from pig to pig by means of the ova which are coughed up and expelled, and then consumed by other pigs. It is difficult to cure the disease, as the worms occupy a situation from which it is impossible to expel them. The only practical measures have been, using resinous pine shavings for bedding, administering turpentine in the food, and giving inhalations of the fumes of burning sulphur. To prevent infection, burn the litter, etc., from infected pens, and isolate the pigs affected.

A Diseased Hog.

R. M., Brandon, Man.: "I have killed a hog which appeared to be in good health and in good condition, but when dressed the insides were in a decayed condition, all grown to the back. The lungs were just beginning to be attacked, and there were two tumors near the lungs. Is the pork fit to use? What is the disease? How is it to be prevented and cured?"

Answer.—Do not eat the meat of the hog you describe. It might not kill you, but it is decidedly unwholesome. It is impossible to say, without an inspection of the carcass, what precise disease affected this hog, but there is no question that it was extensively diseased, and the meat of such an animal is unfit for food. The disease may be tuberculosis, which, although comparatively rare in hogs, would produce the lesions you observed.

A Chronic Cough.

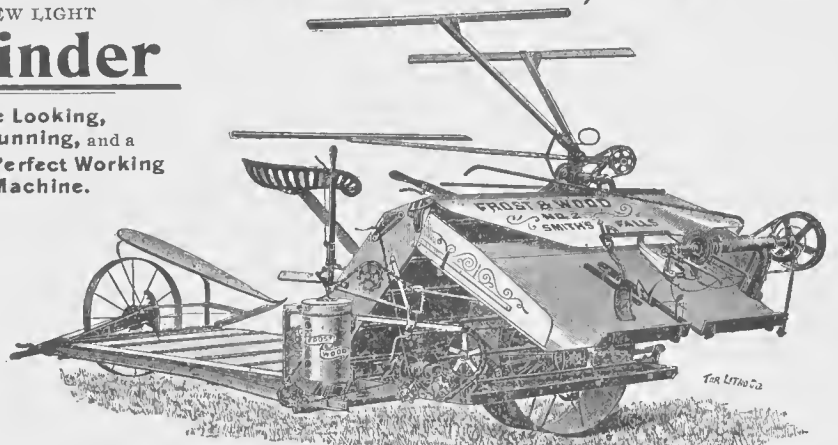
Subscriber, Miami, Man.: "Mare, eight years old, apparently troubled with worms. Have tried several different means recommended to rid her of them to little or no effect. Since about two months ago, or from date of first dosing, has had a sort of dry cough; no secretion at nostrils at any

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time; eats and drinks all right; have given her nearly a pint of oil of tar for cough, in small doses, with very little benefit. Had for a time a very nauseating breath. Mare is lively when let out, but keeps in miserable condition. Have blamed cause of cough to having given mare first set of doses through her nostril, although had dosed horses before through nostril with no apparent ill effect. Have used other means of dosing her since then. Kindly prescribe in your columns."

Answer.—Dosing through the nostril is a very dangerous practice, and has caused the death of many horses. It may be done many times without any bad effect, but sooner or later a case is met with where part of the dose goes the wrong way, passes down the windpipe and gets into the lung. The effect produced depends upon the nature of the dose and the amount that passes into the lung. Watery solutions of non-irritating medicines occasion only temporary symptoms, as they are rapidly absorbed, but anything irritating will set up inflammation of a more or less severe type. Linseed oil is especially injurious when it accidentally gets into the lungs. In the case mentioned, some local inflammation has been caused by drenching through the nostril, and as a result a small portion of the lung has become necrotic or dead and gave rise to the nauseating smell noticed. This has been followed by a tedious healing process, which is still going on, and occasions the irritation shown by the chronic cough. Would advise you to consult a veterinary surgeon, as an examination of the lungs is advisable.

Snow Blindness and Color—Beefing a Cow—Premature Birth.

A. P., Fishing Lake, Assa.: "1. I notice that the white cattle in my herd are snow-blind, while the others do not seem to be affected. Has the color anything to do with it? 2. Is it a good plan to dry a cow up before the calf has sucked her, or to let the calf suck for a few days? We wish to turn the cow off for beef. 3. Have a cow which lost her calf three weeks before time. Was getting plenty of good hay and water stabled. Cow in good condition. What is the cause, and is the disease infectious?"

Answer.—1. Yes, the color has much to do with it. White animals, or "albinos," are deficient in the coloring matter of the skin and its appendages, hair and horn, and

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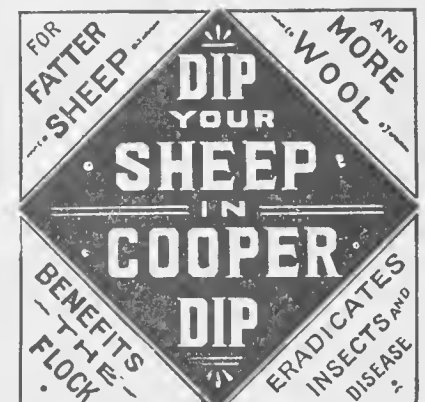
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All kinds of Pumps repaired. Office and Factory, Ninth St., opposite Northern Pacific Station.

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25 gall. pkt., 50 cts. 100 gall., \$2.00.
Case for 1,000 gall., \$15.00.

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this deficiency extends also to the interior of the eye. The posterior chamber of the eye normally contains a lining of deeply pigmented cells, which absorb the light and prevent reflection of the rays of light from one side of the globe to the other, which would confuse the sight. In albino animals this dark lining of the eye is very deficient, as may be noticed by anyone in the eyes of white rabbits and white rats, the eyes of which are pink, instead of black. The absence of the normal amount of pigment in the eye renders it more sensitive to light, and consequently more easily injured by an excessive glare such as occasions snow-blindness.

2. If the cow is naturally a poor milker it would be safe to dry her up without letting the calf suck, but it would be otherwise if the cow is a heavy milker. In this case to leave the udder unemptied immediately after calving would probably cause congestion and inflammation of that organ.

3. Abortion is not always infectious, and in many instances will occur without any apparent cause. In the case of your cow, there is nothing mentioned that would be likely to induce it, but I would point out that this is not a case of abortion, but of premature birth. The difference is that in the latter case the foetus is sufficiently developed to live after birth, while in the former it is not. In bovine animals the foetus is able to do this when born thirty-five days too soon; and therefore a birth taking place within thirty-five days previous to the proper date of calving is not an abortion, but a premature birth. As to naming the cause, there are not enough facts stated to enable me to form an idea, but I will name a few of the most frequent causes of abortion, and you can study out the question for yourself. The causes of abortion, apart from infection, are of two classes—the external and the internal.

The external are: 1. Sudden changes in the weather from heat to cold. 2. Bad food, such as is indigestible and liable to ferment in the stomach and cause formation of gas and pressure on the womb. 3. Bad water. 4. Poisonous plants and ergotized grasses and grains. 5. Excessive muscular exertion, nervous excitement. 6. Blows on the abdomen from kicks, hooks, falls, etc. Standing on a much inclined floor for a long period.

Internal causes: 1. Diseases of the mother, such as tuberculosis or any wasting or febrile disease. 2. Disease of the foetus, such as hydrocephalus (water on the brain) dropsy, etc.

Infectious abortion can only be distinguished from non-infectious by the fact that it spreads from cow to cow in a herd, and it is important, therefore, to treat every case in such a way as to minimize the danger of the disease spreading, in case it should be infectious. You should therefore burn the foetus, the membranes and the soiled litter, and isolate the cow for a couple of weeks from the rest of the cows in calf.

Capped Hock—A Cure for Lice.

Subscriber, Kaleida, Man.: "I bought a blooded colt, 4 years old, which has a puff on the left hind leg caused by kicking against a pole, which was put in to prevent him from kicking his mate. What will take it away without leaving a scar. I have tried and proved to my own satisfaction that to thoroughly sweat a horse will cause the lice on him to come out on the end of the hair. Then I take a cloth saturated with coal oil and rub over the hair where the lice have come out. The oil will destroy them, as the sweat only drives them out. Colts I treat by putting on a blanket, fastening it down tight, and driving the colt around a circle by attaching to the halter shank about 30 feet of rope. Drive at a rapid gait, until thoroughly sweated; then rub over with oiled cloth. Allow the heated animal to cool down, but on no ac-

count water an animal until it is thoroughly cooled off."

Answer.—The puff you speak of is a capped hock, a disagreeable blemish, as it labels the horse a kicker, and it is very difficult to remove. You must first arrange his stall so that there is nothing for him to bruise his hock against, if he should kick. Then apply the following: Biniodide of mercury, two drachms; iodide of potassium, a sufficient quantity to dissolve the mercury in 10 oz. of soft water. Wet the swelling with this twice a day. When the skin becomes irritated stop the application until it recovers its usual condition.

Thank you for the cure for lice. It seems a reasonable and good one, and some of our readers will doubtless try it and report.

Tuberculosis of Poultry.

Subscriber, Dauphin, Man.: "Can you tell me what the name of the disease is (if it is a disease), which affects hens that have been laying regularly for some time. I killed one yesterday, cut it open, and in the back parts, outside of the intestines, there was one-half pint of thick yellowish liquid about the same as the white of an egg, but of a yellowish color and very gritty. When cutting it, it felt as though cutting through fine glass or grit. I have been feeding shorts in the morning and wheat for dinner and evening, also giving them lots of wood ashes, willow and poplar. Had a few hens the same way about fifteen years ago. They will not eat anything, and if left go on until they die, become filled with the liquid and smell very strongly and offensive."

Answer.—Poultry are often affected with tuberculosis, and the result is often a condition similar to what you have described, a sac filled with fluid containing gritty particles. The disease is contagious, and you should weed out of your flock any birds that seem to be unthrifty, or thin or unusually pale in the comb, or are affected with diarrhoea. Give the poultry house a good whitewashing and admit plenty of light and air.

A Breeding Question.

A. A. T., Napinka, Man.—"Would you recommend buying a Shorthorn heifer for breeding purposes that had produced her first calf to an Ayrshire bull? Would her after calves be likely to resemble Ayrshires. Is a heifer that produced a calf at two years and three months old likely to develop into as large a cow as one which did not calve until three years of age?"

Answer.—1. The answer to this question depends upon the prepotency of the Ayrshire bull. In some cases the prepotency of a bull is such that he affects not only his own offspring, but one or more subsequent calves by different sires. The only safe way is to let some one else discover whether the Ayrshire bull was prepotent or not.

2. No. Breeding animals before they have reached maturity is a pernicious practice, working injury both to the dam and her offspring. The former has the additional strain of the growing foetus when her own body is still calling for the materials for building up its frame, and it is reasonable to suppose that one or the other will suffer in consequence. The dam may be stunted in size, or the calf may inherit a weak constitution and be lacking in stamina and vigor. The bad effects of early breeding are not immediately apparent in well-cared-for herds, but in three or four generations it becomes quite noticeable.

H. F. Brown, Minneapolis, sold, March 29th, 44 head of Shorthorns. Three females made \$400 each, and the average of the lot was \$213.

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Owing to the ragged nature of the wounds and the poison of the wire, are the most difficult of all flesh wounds to heal, and the only successful remedy is

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The only remedy that will positively cure Scab in sheep. It is also invaluable for the cure of Skin Diseases in cattle, such as bruises, sores, ringworm, gangrene, shear cuts, and for ridding them of vermin. Widely endorsed by the leading stock-raisers of Canada as the best preparation of its kind in the market. Try it.

Persiatric Pig Wash

This preparation acts most satisfactorily on the stubborn Skin Diseases in swine. Has a soothing, healing influence, healing sores and eczematous diseases, and rids the animal of vermin. It acts as a tonic on sickly, depressed animals. Used a week or so before slaughtering, it makes a handsomely dressed animal for market.

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This is a preparation of highly-concentrated curative qualities for the curing of Skin Diseases, and for killing all vermin in horses and cattle. Cures Scratches, Mange, Ringworm, Grease, Pczema, Urticaria, etc. Heartily recommended by horse breeders and leading veterinary surgeons.

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Market Review.

Winnipeg, April 20th. 1899.

The bad roads, while having a depressing influence on the market in some ways, have tended to steady and increase the values of nearly all farm products. General trade shows considerable improvement and every business man is looking forward to a big season's business. Implement men report business beyond their most sanguine expectations and that they cannot supply the demand. Further advances in the prices of cut and wire nails, horseshoe nails, and wood screws.

Wheat.

The uncertainty as to the effect of last winter's frost on the American crop has been so far cleared up and produced a quicker feeling than has been known for months. Ohio, Michigan, Kansas, Nebraska, Illinois and Northwestern Missouri are the States from which the most discouraging reports have come, and yesterday's was the highest quotation at Chicago since these alarmist reports came out. May wheat opened at 73½c., and closed at 76c. To-day so far the feeling is weaker and prices fully half a cent back.

On the Winnipeg market sales were made at 72½c. to 73c., Fort William.

Oats

Feed oats on the street market here are worth 35c. to 38c., as to quality.

Quotations on all other grain and feeds remain at unchanged prices, as given in our last issue.

Cattle.

Owing to a fear that there might be a corner in stall-fed cattle there has been some lively hustling among the buyers during the last few weeks, and high prices have been paid in some cases to secure good cattle. Butchers have to depend from now until July on stall-fed stock for their supplies. These supplies are none too large, and even now cattle are being put up to feed in anticipation of prices keeping up until grass-fed stock comes in. Choice fat cattle bring from 4½c. to 5c. at country points.

Stockers bring up to 4c., according to quality, or about \$14 to \$16 for yearlings, and \$22 to \$24 for 2-year-olds. Trade rather quiet now.

Milch cows in good demand at from \$30 to \$40.

Sheep.

Sheep are moving slowly at from 4½c. to 5c. Spring lambs 8 to 10 weeks old bring \$4.00.

Hogs.

Hogs are beginning to move a little more freely and choice lots bring 4½c., weighed off the cars. Dressed hogs are scarce and bring from 5½c. to 6c.

Butter.

Creamery—Demand good for new make, in prints or boxes, at 21c. to 22c.

Dairy—Choice in rolls or tubs, in good demand at 15c. to 17c. Lower grades are plentiful and worth only 13c. to 14c. Too much of it offering and no demand.

Poultry and Eggs.

There is generally a decline in poultry values after the Easter market but prices are on the rise instead, as it is almost impossible to get any kind of poultry at all. Turkeys, 15c.; chickens, 10c. to 12c.; live chickens, 70c. to 80c. per pair.

Eggs—The bad roads and backward weather are holding back supplies, and eggs are worth more money than they were two weeks ago. Good fresh eggs are worth 17c. to 18c., and on the local farmers' market much higher prices have been obtained.

Potatoes.

One large supply of potatoes in the city was dumped on the nuisance ground, and fears are entertained that more may follow. Prices rising. We quote 50c. in lots. In retail way 70c. is being obtained.

Live Stock Impounded.

Impounded.

Indian Head, Assa.—One pony, cream, white spot on forehead and nose, hind feet white, dark mane and tail; pony, buckskin, 3 white feet, dark mane and tail, large white stripe on face; pony, light red roan, legs and face white, tail and mane light; mare, buckskin, dark points, small white spot on forehead; pony mare, white, small rope around neck; mare, broncho, bay, black points. Louis Arnold, 22, 17, 13 w2.

Lost.

Starbuck (Macdonald municipality), Man.—One 3-year-old grade Clyde mare, dun color, branded AM on left thigh. Reward. Murray Bros.

Estray.

Broadview, Assa. — One brindle muley cow, 5 years old, both hind legs white, likely to calve soon; also one bay, 2-year-old, entire horse, white star on forehead. A. E. Cornish, 12, 15, 5.

Lacombe, Alta.—One steer, 2 years old, white. L. H. Gay.

Willoughby, Sask.—One heifer, red and white, horse-shoe brand on left hip. R Tait.

During the last few years there has been a great change in the opinion of American breeders with reference to the question of color. At one time nothing would do but pure red, and even in the stockyard, red beef cattle had the preference. This prejudice is fast dying out, and the very highest prices are now being paid for roans, the Scotch Shorthorns being the means by

which the change of opinion has mainly been brought about.

The severe losses suffered by some of the ranchmen of the Southwestern States during the past winter, coupled with the crowding of the range, is causing the ranchers to seriously consider the question of growing large acreages of corn, sorghum and similar forage crops on various parts of their ranches. With a store of this kind of food at hand during a hard winter herd-ers could bring in weak cattle and feed them.

Red Polls, a breed that has for some time been carefully worked up in Norfolkshire, England, and adjacent counties, have recently been taken up with favor in the middle Western States. J. J. Colman, the great mustard manufacturer, has for many years been carefully breeding up this variety and having died recently, his herd was sold at auction. A yearling heifer brought \$2,750, and a bull \$1,760. There were more fancy prices paid, and the average for the whole herd was over \$385.

The Royal Agricultural Society of Ireland has issued a recipe for dehorning calves as follows: "Clip bare a small space of about an inch in diameter over the budding horn, wet the spot, and rub well with the caustic potash (which can be procured at any chemist's) till the part becomes red. Apply twice before the calf is a fortnight old. One application is generally sufficient but to make quite sure it is better to apply twice. Care should be taken not to touch the potash with the fingers, as it injures the skin. It should be rolled in a piece of tin-foil. When not in use the caustic potash should be kept in a bottle, because it rapidly absorbs moisture from the air and becomes liquid. Caustic potash is poisonous." Some people roll up the potash in oiled paper, to avoid being burnt when handling it.



In Manitoba for Business.

DAVID BRADLEY MFG. CO.

Successors to Furst & Bradley M'fg Co., formerly of Chicago, Ill., but now located 54 miles south of Chicago, at Bradley, Ill., U.S.A., Manufacture the Celebrated

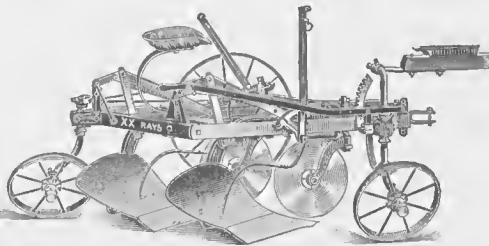
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Which Penetrates anything plowable, and draws 50 to 75 lbs. lighter than other plows doing the same work.

Has a patented Stop that carries the plow bottom when at work—thus lightening the draft.

A powerful lifting spring makes raising the plow out of

It is furnished with our patent SPRING CLEVIS, which eases the strain upon team and harness whenever the plow strikes an obstruction, and which gives a more even and therefore less fretting draft to the team at all times.



the ground so easy that a 12 years old boy can easily operate it.



Fitted with our celebrated 'Garden City Clipper' bottoms they will scour in the most difficult soils.

For Prices and Terms and for particulars concerning agencies, please address our Branch House at Minneapolis, Minn.,

BRADLEY, CLARKE & CO.

ALEX. C. McRAE,

Agent at Winnipeg.

Poultry Terms Explained.

For the benefit of those who do not know the different points of a bird, we give the following explanation of terms and the accompanying illustration, taken from "Success With Poultry":—

Beard.—A bunch of feathers under the throat, as in the Houdans and Polish.

Carunculated.—Fleshy protuberances, as on the neck of a turkey cock.

Carriage.—The upright attitude of a fowl.

Clutch.—The eggs set under a hen, duck or turkey.

Cockerel.—A young cock, not a year old.

Crest.—Top knot of feathers, as on heads of Polish.

Crop.—The first stomach of a fowl, where the food is masticated, as it were, preparatory to digestion.

Ear-Lobes.—Fold of skin hanging from the ears.

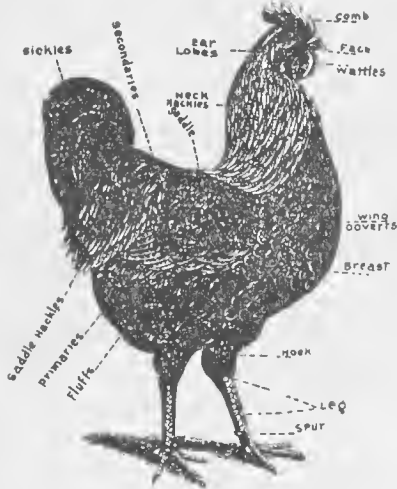
Face.—The bare skin from top of bill around the eyes.

Flight Feathers.—The primary wing feathers, used in flying.

Fluffs.—Downy feathers around the thighs.

Hackles.—The narrow, lance-like feathers on a fowl's neck and the posterior of the back.

Hen-Feathered.—A cock without long, sickle-shaped tail feathers.



Hock.—Elbow joint of the leg.

Keel.—The breast-bone.

Leg.—The shank from elbow down.

Leg-Feathered.—Having feathers growing on outside of shank, same as Brahmas and Cochins.

Mossy.—Uncertain markings.

Pea-Comb.—A snug triple comb.

Pencilling.—Small stripes running over a feather.

Poult.—A young turkey.

Saddle.—The posterior of the back; and the feathers of it are called saddle-feathers, or saddle hackles.

Secondaries.—The quill feathers of the wing, which show when fowl is at rest.

Sickles.—The upward curving feathers of a cock's tail.

Spangled.—Spots on each feather of different color from the ground color of the feather.

Strain.—A race of fowls bred unmixed for years.

Tail-Coverts.—Curved side-feathers at bottom of tail.

Trio.—One cock and two hens.

Vulture-Hock.—Projecting feathers at the hock joint.

Wattles.—The red, fleshy excrescences under the throat, as of a cock or turkey.

Wing-Bar.—A dark line across the middle of the wing.

Wing-Coverts.—Feathers covering the roots of the secondary quills.

Louise Bridge Poultry Yards

UNCONQUERABLE.

My noted strain of Single and Rose Comb White Leghorns, White Wyandottes and Black Spanish have again proved their superiority, winning at the Brandon Poultry Show, February, '99, 15 first prizes, 10 seconds, 4 thirds, 3 Silver Cups and Gold Medal; also \$5 sweepstake for 4 highest-scoring birds in the Show. I exhibited 39 birds, with an average score of 94½ points per bird. A record like the above was never equalled in Manitoba. I have mated up the finest pens of the above varieties that can be found in America. Eggs from these grand pens \$3 per 13, \$5 per 26. B. P. Rock Eggs \$2 per 13. No more White Wyandotte Eggs for sale. Have all orders that I can possibly fill. Address—

GEORGE WOOD,
Louise Bridge P.O., Winnipeg, Man.

Oak Grove Poultry Yards,

LOUISE BRIDGE P.O., WINNIPEG, MAN.

A few pair of young Pekin Ducks from imported and prize-winning stock, at \$4.00 per pair.

My Turkeys are all sold, except those required for breeding stock. Am breeding from two of as fine yards as there are in Manitoba.

I am sole agent for Manitoba and N.W.T. for GEO. ERTLE & CO.'S VICTOR INCUBATORS and BROODERS. These machines have copper tanks, moisture pans, thermometers, egg testers, egg turners, regulators and lamps. Everything is complete, and every machine goes out with a guarantee that it will do as represented or money will be refunded. Send for 1899 Circular.

Address—CHAS. MIDWINTER,
Louise Bridge P.O., Winnipeg.

BUY WINTER LAYERS.

LIGHT BRAHMAS.

Pen No. 1. Were purchased and selected by Judge L. G. Jarvis, of Guelph. Eggs \$2.50 for 13.

Pen No. 2. Eggs \$1.50 for 13.

I am importing ANCONAS, the greatest winter layers known. A limited number of sittings at \$5 per 13 after April 25th.

ANCONA POULTRY YARDS, Box 562, Winnipeg

B. P. ROCKS WINTER LAYERS.

Over 2000 Eggs from 41 pullets in January, February and March, 1898. I can supply EGGS for HATCHING from the above First-class Stock at \$2 per setting. Special prices for Incubator Eggs. I can guarantee a large percentage of fertile eggs. A few good breeding Cockerels for sale.

E. B. LEMON,
care of Osler, Hammoud & Nanton, Winnipeg.

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Breeder of Exhibition B.P. Rocks, S.L. Wyandottes and B.R. Game Bantams. I have mated this season four pens of B.P. Rocks and two of Wyandottes. Pen A in B.P. Rocks mated for cockerels; pen headed by imported cock. Pen B mated for pullets, and headed by 1st prize cockerel at Man. Poultry Ass. Show at Brandon in Feb. Pen C mated for pullets, and headed by an imported cockerel from which I look for grand results. Pen D mated for cockerels, and headed by my ideal cockerel scoring 92½ by Judge Shellabarger at Brandon, the highest scoring B.P. Rock in the Show. Wyandottes mated for best results. Can furnish Eggs from the above pens at \$3 per 13, \$5 for 26. If you want the best at fair prices, here they are. Satisfaction guaranteed.

WHITE PLYMOUTH ROCKS.

Winning at last Exhibition of Manitoba Poultry Association four firsts and two second prizes.

If you want good birds, write for prices.

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696 McMicken St., Winnipeg.

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Importer and breeder of

Exhibition Barred Plymouth Rocks, Black Minorcas, Black Hamburgs, S. L. Wyandottes, Cornish Indian Games, S. C. White and Brown Leghorns.

Eggs \$2 per setting.

T. H. CHAMBERS, BRANDON, MAN.

The Reliable Poultry Yards,

12TH ST., BRANDON, MAN.

Importers and breeders of standard bred poultry.

EGGS FOR HATCHING

of the following varieties at \$1.50 per 13: L. Brahmas, B. P. Rocks, Indian Games, S. C. W. Leghorns, and Buff Pekin Bantams. All my prize-winners are in the above pens. W. and S. L. Wyandottes, Black Minorcas and S. C. Brown Leghorns, Eggs \$2.00 per 13; \$3.50 per 26. Also Golden Pheasants but no eggs. No stock for sale until after breeding season.

W. H. Garside, Mgr., Box 299.

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Breeders of pure Stock in the following lines of Poultry:—

Barred and Buff P. Rocks. Golden and Silver Spangled Hamburgs. Black Langshans. Eggs, \$2 for 13; \$3.50 for 26.

Stock for Sale. Will help customers to get any other Stock required.

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THE "ACME" POULTRY YARDS.

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EGGS for HATCHING from high-class SINGLE COMB WHITE LEGHORNS—

Pen No. 1, a choice mating - \$2 for 13

Pens No. 2 and 3 - \$1 for 13

B. P. ROCKS, \$1 for 13. A few S. C. W. LEGHORNS for sale, male and female.

BLACK AND PARTRIDGE COCHINS.

HOUDANS & RED GAME BANTAMS.

Eggs from above stock \$2 per 13. Have also a few choice Embden Geese and Cochins Cockerels, as well as Pekin Bantams. The above stock took 33 prizes at Manitoba Poultry Show, February, 1899.

W. Anderson, Box 368, Brandon, Man.

HIGH-CLASS POULTRY & PET STOCK.

Buff Rocks, S. C. Buff Leghorns, Silver Spangled Hamburgs, Cornish Indian Game, Black Red Game and Golden Seabright Bantams. Eggs from all of above stock at \$2 for 13. Also Pigeons—Black Fans, Black Carriers, Blue-pied Pouters, Short-faced Tumblers, Oriental Frills, Homers, Red and Black Jacobins, and Guinea Pigs.

H. W. Balla, Portage la Prairie, Man.

EGGS FOR HATCHING, \$2 PER SETTING.

W. Wyandottes, Barred P. Rocks, B. Javas and S. C. W. Leghorns. Following are some of the winnings and scores made at Brandon, Feb., '99: 1st prizes for pens of W. Wyandottes and Black Javas; 1st for W. Wyandotte pullet, scoring 94½; and 2nd for cockerel, 93½; 3rd for B. P. Rock hen, 91½, and cockerel, 90½; S. C. W. Leghorn pullet, 94, and cockerel, 92½—John Kitson, Macdonald, Man.

B. Plymouth Rocks.

When in need of Eggs for Hatching, don't forget that we can supply you with them at \$3 per 13, or \$5 per 26. Our 18th Annual Circular and Price List is free, and fully describes our stock. You have but to address me.—F. H. Shellabarger, Box 57, West Liberty, Iowa, U.S.A.

WINNIPEG POULTRY YARDS.

HOUDANS AND GOLDEN WYANDOTTES.

At Poultry Show, Brandon, February, 1899, won on Houdans 1st Cock, 1st Cockerel, 1st Pullet, 1st Pen. Special for best display. Numerous prizes won last five years. Have also grand pen Golden Wyandottes. Eggs from either breed \$2 per 13. Choice stock for sale. Address—S. Wiae, 633 Ross ave., Winnipeg, Man.

EGGS! EGGS!

Black Minorcas from prize-winning stock wherever shown. S. L. Wyandottes' pen headed by Cockerel scoring 91½ and tying for 1st place at Brandon, Feb., '99. Will also sell trio of L. Brahmas and S.L. Wyandotte cockerels.—E. BROWN, Boissevain, Man.

The Care of The Sitting Hen.

The first essential to success in sitting a hen is to have the eggs fresh and fertile. The fresher the eggs, as a rule, the more promptly they will hatch and the more active and thrifty the chicks will be. In selecting a place for the nest, it is always well to remember to keep the nest as low down as possible. Some prefer to have the nest on the ground, if possible, or else have a little earth in the nest. Some like a green sod turned up as a nest bottom; when the sod begins to decay it will furnish a certain amount of heat. But good hatches have been made in all ways—with and without earth.

Now comes in the great value of having your hens tame and accustomed to you. For then you can move every clocking hen to a box stall or closed place and set her in a nice box by herself. Some get old cheese boxes or other square boxes, and arrange them along the sides of a room, and in these they place the hens that want to sit. They will thus be away from the laying hens, and there will be no need to be on the lookout for new-laid eggs in the nests. Besides having all the sitting hens in one room, they are much easier looked after. Water, feed and grit can be kept ready for every hen when she comes off her nest. We have seen more than twenty hens all sitting in one small room. All nests should be large and roomy, rather flat than deep. They should be well up to the top of any box or keg in which they may be placed. If a hen has to jump down into her nest there is danger of her breaking some of the eggs.

Before being put on a sitting of eggs, the hen should be thoroughly dusted with insect powder to destroy lice. The nest should receive a good dusting, too. Repeat once a week during the sitting period, and again when taken from the nest with her brood. It is well to slightly touch each chick on the head and throat with a small quantity of sweet oil or lard. It is a good idea to give the last dusting a day or two before the young chicks hatch out. A dust bath should be kept in the hatching room, so that the hen may take a bath herself when off the nest. Sometimes hens have been driven off their nests by vermin. Look out for them.

In selecting eggs for hatching reject all odd-shaped, very small, or rough shelled eggs. Turn the eggs you are saving half over every twenty-four hours, and do not allow them ever to become chilled.

To secure early winter layers, it is necessary to have the chickens hatched early. Chickens hatched before the first of May should be ready to lay by the first of December, if not before, if they are properly grown.

During the busy work of spring, don't forget to look after the lice and mites in the hen house as the warm weather comes on. These pests will do a lot of harm by keeping your flock in an unprofitable condition. Get rid of them.

Select your eggs for hatching from none but the best layers. It will pay to study and watch your hens a little. Find out your best layers and mate them up with a good cock. Don't take your eggs for hatching indiscriminately from the eggs from the whole flock. Select! Select!

Arrange for a sitting of eggs from some reliable breeder of pure bred stock as early as possible. A sitting of eggs of the breed you fancy does not cost much, and pure stock is just as easily kept as the mixed lot. Not only are the males thus obtained of a fresh strain, but the pullets thus added contribute fresh mother blood to the flock, and you gradually change to a better class of stock.

As showing what a small flock of hens will do, it might be well to mention that O. M. Lord, of Minnesota City, says that he kept a careful account of what his flock of 20 hens did for him from April 1st to November 1st. He sold \$65 worth of young chickens and \$10 worth of eggs, besides having all the chickens and eggs his family of eight could use. None were sold at fancy prices, and the flock numbered 25 more than when he began. His hens were of Plymouth Rock and Wyandotte strains.

Interest the boys and girls on the farm in poultry. Let them have a sitting of eggs and all they can make from the sitting, if they will look after the hen while she is sitting and the feeding of the young chicks until they are ready for market. There may be no money in it for you, but it will be splendid training for them. It will interest them in farm work. If they show an ability in this line, let them have entire charge of the poultry, assist them all you can in the development of this profitable branch of farm work. Give them some share in the profits. Don't let them do all the work and you pocket all the money. Nothing will sicken them of farm work so quickly. Let them have a little pocket money, but let them earn it, and you assist them to do so. If boys and girls can see that money can be made on the farm, they will not be so ready to leave it for the city.

Faith in Hood's

The Great Cures by Hood's Sarsaparilla Are Indeed Marvelous.

"My husband suffered with stomach trouble so bad at times he could not work. He has taken Hood's Sarsaparilla and it is helping him wonderfully. He also had a scrofulous humor but Hood's Sarsaparilla cured this and he has had no trouble with it since. My little boy, too, has been taking Hood's Sarsaparilla and it has given him a good appetite. We have great faith in Hood's Sarsaparilla." MRS. J. H. EDWARDS, 50 Edinburg St., Rochester, New York. Be sure to get Hood's because

Hood's Sarsaparilla

Is the best—in fact the One True Blood Purifier. Sold by all druggists. \$1; six for \$5.

Hood's Pills are the best after-dinner pills, aid digestion. 25c.

EGGS FOR HATCHING. \$2 for 13, from 1st Prize stock in Barred Plymouth Rocks, S. L. Wyandottes, Black Minorcas, S. C. B. Leghorns. Also some Al S. L. Wyandotte stock for sale. Sixteen birds (scored by Shellabarger) scored from 88 to 93%. Only three scored less than 90 points. A. J. Carter, Brandon, Man.

B.P. ROCKS EXCLUSIVELY

Hawkins' strain. Have two choice breeding pens Eggs at \$2 per 13.

Carberry Poultry Yards. Wm. Atkin, Box 27.

90 Varieties Choice Poultry. Eggs, Pigeons, German Hares. Described in a natural colored 60 page book, 10c. J. A. BERGEY, Telford, Pa., U.S.A.

OUR INCUBATORS

Are absolutely self-regulating. They supply their own moisture. Will have no Customs duty to pay on them. They are fully guaranteed. Write for free circular to-day.

J. E. MEYER, Box 30, Kossuth, Ont.

EGGS! EGGS!

Fertile Eggs for Hatching are produced by feeding Fresh Green-cut Bone and Crushed Oyster Shells. When in need of any **POULTRY SUPPLIES** write me. A few fine Pekin Ducks and some Light Brahmas for sale. Ducks Eggs, \$1 per setting.

R. DOLBEAR, 1238 Main St., Winnipeg.

WHITE P. ROCKS EXCLUSIVELY.

Winner of the Lieutenant-Governor's Cup and Gold Medal, Manitoba Poultry Show, 1899, for best Pen any breed. Eggs from the above birds \$2 per doz.

T. M. PERCIVAL, Brandon, Man.

EGGS FOR HATCHING.

From the following varieties of Standard-bred poultry—B. P. Rocks, White & Brown Single Comb Leghorns, \$1 per Sitting. White-face Black Spaulish, Black Langshans, Buff Cochins, Light Brahmas, S. L. Wyandottes, \$2 per Sitting per 13 Eggs. Toulouse Goose Eggs, 40c. each. Imperial Pekin Duck Eggs, \$1 per 11. Fertility guaranteed.

RELIABLE POULTRY YARDS, HOLLAND, MAN.

John Longmore, Prop. Correspondence solicited.

LIGHT AND DARK BRAHMAS, SILVER GREY DORKINGS, WHITE PLYMOUTH ROCKS.

EGGS \$2 per 13. The above birds are all of the very best stock, winning 10 prizes at Manitoba Poultry Show, 1899. The Dorkings have never been beaten.

A. MUTTER, Brandon, Man.

Light Brahmas, Buff Cochins, B.P. Rocks, W. Wyandottes, Houdans and Pekin Ducks.

Stock for sale. Eggs \$2 per 13; special price for larger quantities. No pains or expense has been spared in getting together the best stock obtainable. Our pens are headed by first prize birds at Winnipeg Poultry Show and Exhibition. For best results address—

VIRDEN POULTRY CO., Box 355, Virden, Man.

MAPLE GROVE POULTRY FARM,

ALLYN HOBSON, KILLARNEY, MAN.

BARRED PLYMOUTH ROCKS and PEKIN DUCKS.

Settings of Eggs for spring hatching, \$1 for Rocks and \$1.50 for Ducks. Young cockerels for sale from \$1 up. All orders properly packed.

Light Brahmas, Barred P. Rocks, Indian Games, Black Minorcas, Pekin Ducks.

My birds are all from high-class imported stock. Satisfaction guaranteed. EGGS \$1.50 per 13.

REUBEN CLIFFORD, Elkhorn, Man.

Buff Cochins.

Eggs at \$2 per 13 from my Prize-breeding Pen. These birds have never been beaten. Also a few choice Cockerels for sale cheap.

F. D. BLAKELY, 2304 285 Ellen St., Winnipeg

Mmth. Bronze Turkeys
Toulouse Geese
Pekin & Rouen Ducks
S.L. & W. Wyandottes
B. Plymouth Rocks

Eggs

These are the varieties our experts advise all to breed, being well adapted to our climate and most saleable in our markets. I have the best obtainable in these varieties, and will supply eggs at same prices others charge. My Turkeys are headed by two mammoth gobblers weighing 42 and 46 lbs., hens weighing up to 24 lbs. Geese 45 to 50 lb. pairs. Ducks mated with drake, pronounced by Butterfield an extra grand bird, with great length of back and deep keel. My Turkeys, Geese and Ducks have won most first prizes and medals at all leading shows in strong competition. If you want the best from acclimatized stock, write me, and I will mail you free a catalogue with photos of birds and full particulars, also a sure and cheap receipt for destroying lice on birds and in houses. If you are in a hurry, send the cash you wish to invest, and I will give you full value.

MAW'S POULTRY FARM, WINNIPEG.

Common Mistakes in Barns.

Barn-building now-a-days is getting to be a science in itself. So many innovations are being introduced into modern farming that to secure the most satisfactory arrangement for the housing, handling and care of stock, the arrangement of the superstructure to facilitate the use of the latest machinery and the combination of all parts to secure the greatest measure of economy, durability and convenience requires careful and exact planning.

There are a few mistakes which we have found more or less common among the barns which have been built during the past one or two seasons, and we will mention two or three of them just on the principle that to be forewarned is to be forearmed.

COLLAR BEAMS TOO HIGH.

The first one—and a very common one—is to put the collar beams so high that neither a hay fork nor a sling can be operated. This is a mistake which it would be supposed no wide-awake builder would make twice, yet quite a number of the new barns which we have seen have their collar beams so high that the owners must have them cut out and lowered if a hay fork is ever used. This is a serious fault, and the lowering of a beam after erection must weaken the frame considerably. There should be, we would say, at least twelve feet between the peak of the barn and this beam. In building, plan for this—and see that it is right.

VENTILATION.

Another point is the ventilation. So much has of late been said along this line that most farmers should be able to get a pretty good plan. Yet, again, some of the best barns we have seen of last season's building show that this essential feature was not carefully thought out until quite late in the game. The result was that some indifferent system was adopted.

In some places farmers have ventilation shafts so arranged that they run through the peak of the roof in such a place that they most effectually cut off the use of a hay fork. If shafts running through the barn are to be used at all, it is probably better to run them at some distance from the sides or ends of the barn, so as to keep them as much as possible from the frost (of course, being sure that they are perfectly air tight, so as not to steam fodder), but is it not a much better plan to run them through part way up the roof, rather than carry them to the centre and have them so much in the way of machinery? However, it is a matter open to much question if shafts through the barn should ever be used.

FLOOR LEVELS.

A third defect which we have noticed, particularly in stables with cement floors, has been that the proper slope and height of the floors has not been secured. In one or two places the owner was going to tear up the floor of the passage way behind the cattle because it was too high and rounding. The floor behind cattle, perhaps cement ones especially so, is always apt to be more or less slippery and if this is made in the form of a railroad elevated bridge approach, why the results are apt to be disastrous to stock which have to travel over it. And then it is not real nice to have to tear up one's floor and lay it over again.

PLAN WELL.

When a farmer builds a barn he expects it to stay built for a long time. Consequently he cannot make too good a job of it while he is at it. It pays to have the plans perfectly formulated before the first stones are laid. It is easier to

change the plans and specifications than it is to alter the barn after it is up. If you are going to build, look around. See all the best barns within twenty miles, and find out all the fine points. Unless your memory is an extra good one, or you have the Japanese art of imitation, take a note-book along and jot down the details. It is sometimes easier to remember measurements on paper than in your head. Religiously observe the mistakes as well as the good points. Then put on your thinking cap. If you cannot make that barn just a trifle better than the best you have seen—well, there is something wrong just under your cap, that's all.

Even if one turned all his fields into pasture and material for ensilage and fed it to stock it would not be an unwise proceeding. Ten acres of ensilage corn will, if cut at the right time and put into a good silo, help wonderfully to solve the problem as to how stock may be kept profitably.

The biggest yield in calves yet known is reported from Bethel, Minnesota. A $\frac{3}{4}$ Holstein started with one calf, then had twins twice, and on February 3rd had five at one birth. Four of them are still alive, but the dam is dead. There were three heifers and two bulls in the lot. The heifers weighed twenty-four pounds each, one of the bulls weighed twenty-eight and the other thirty pounds. The total weight was one hundred and thirty pounds. The sire was a full-blooded Jersey.

The Ohio Experiment Station has for the last two years been carrying on an experiment with tuberculous cows that promises to be of more than local interest. They have now on hand a lot of cows that have reacted to the tuberculin test, and have fed the milk from these cows to calves and pigs. Several of these cows have been under inspection for two years, and so far as external observation can determine, are still in perfect health. It is proposed to kill the whole lot early in April under the inspection of the U. S. Bureau of Animal Industry, and so furnish the profession an object lesson on the teaching of the tuberculin test.

A little forethought in providing proper accommodation for the brood sow pays exceedingly well. Clumsy sows lying on and killing their young are common experiences on the farm and seriously reduce the profits. A large measure of this may be avoided by not having the sows too fat. Keep the sow quiet. Avoid using too much straw as litter. Cut straw makes a good bed, as the sow cannot then gather it into a "nest," which is always dangerous to young pigs, in that it is almost impossible for them to escape should the sow lie down on them. It is a good plan to fix a railing around the farrowing pen. It should be about six to eight inches above the floor and about a foot from the wall. When the sow lies down against the wall little pigs are apt to get crushed between the sow and wall, but such a railing prevents this and allows the young porker to escape.

Their gentle action and good effect on the system really make them a perfect pill. They please those who use them. Carter's Little Liver Pills may well be termed "Perfection."

For Over Fifty Years

MRS. WINSLOW'S SOOTHING SYRUP has been used for over fifty years by millions of mothers for their children while teething, with perfect success. It soothes the child, softens the gums, allays all pain, cures wind colic, and is the best remedy for Diarrhoea. It will relieve the poor little sufferer immediately. Sold by Druggists in every part of the world. Twenty-five cents a bottle. Be sure and ask for "Mrs. Winslow's Soothing Syrup," and take no other kind.



Men who work on, in, or by the water, or are exposed to the cold or damp are prone to suffer from that most painful disease, rheumatism. This is a disease of the blood and can only be permanently cured by going back to first principles and driving out all impurities, and filling the arteries with a new, rich, red, healthy life-stream.

This is the reason why Dr. Pierce's Golden Medical Discovery is an unfailing cure for that disease. It is the greatest of all blood medicines. It creates a keen and hearty appetite. It cures all disorders of the digestion and makes the assimilation of the life-giving elements of the food perfect. It invigorates the liver and tones the nerves. It is the greatest of all known blood-makers and blood-purifiers. It builds firm, healthy flesh, but does not make corpulent people more corpulent. Unlike cod liver oil, it does not make flabby flesh, but tears down the unhealthy tissues that constitute corpulency, carries off and excretes them, and replaces them with the solid, muscular tissues of health. It drives all impurities, disease germs and acids from the blood. In Dr. Pierce's Common Sense Medical Adviser many sufferers from rheumatism, whose cases were considered hopeless, tell the story of their recovery under this wonderful medicine. Their names, addresses and photographs are given by their own request, and anyone who wishes to do so may write them. Good druggists sell the "Golden Medical Discovery."

When a dealer urges some substitute he's thinking of the larger profit he'll make—not of your welfare.

"I suffered from rheumatism in my left shoulder and elbow," writes Rev. Wilson Williams, of Trinity Station, Morgan Co., Ala. "Dr. Pierce's Golden Medical Discovery completely cured me at a cost of only four dollars."

For a free, paper-covered copy of Doctor Pierce's Common Sense Medical Adviser send 31 one-cent stamps, to cover customs and mailing only. Cloth-bound 50 stamps. Address Dr. R. V. Pierce, Buffalo, N. Y. A medical library in one 1008-page volume.

Of Interest To Farmers who have Scrub to Remove.

The patent has just been issued for an implement that will **effectually** remove scrub of all kinds, root and branch. It does not matter whether the top is on or off.

These **LAND SCRUBBERS** are made for either one or two teams, and are **guaranteed unbreakable** and will last a lifetime. They weigh from 45 to 60 lbs., and are made of the best sleigh shoe steel.

The patentee has been working on this Scrubber for some years and it is now perfected. One man with one team of horses will pull as much scrub in one day as any five men will chop, and **will do it right**.

Correspondence solicited. All questions promptly answered. Address, **A. E. BROWN, Hamiota, Man.** All infringements on this patent will be prosecuted.

READ WHAT IS SAID OF IT:—

The "Hamiota Hustler," of Oct. 25, 1898, says of this machine: "Mr. A. E. Brown gave a test exhibition of his Patent Land Scrubber on Friday afternoon last. About 100 farmers and others were present to see the Scrubber working, and the general expression of opinion was that 'It was just the thing for taking out scrub.' Clumps of willow scrub and poplar trees were taken out slick and clean with one team of horses. An implement of this kind will no doubt be appreciated by farmers who have land to clear of scrub. It certainly does the work well and is a great improvement on the old style of cutting out by hand."

COLD STORAGE

For Creameries, Dairymen and Butchers. References—C. C. McDonald, Dairy Inspector, and Ald. T. Cowan, Winnipeg. Prices given on application.

G. T. LAIRD, 214 James St., Winnipeg.

THE NOR'-WEST FARMER

ISSUED TWICE A MONTH.
ESTABLISHED 1882.

The only Agricultural Paper printed in Canada between Lake Superior and the Pacific Coast, and issued on the 5th and 20th of each month.

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WINNIPEG, MANITOBA.

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Transient advertisements, for less than three months, 15c. a line (each insertion). Terms for longer periods on application.

All advertisements estimated on the Nonpareil line—12 lines to an inch. A column contains 128 lines.

Copy for changes in advertisements should be sent in not later than the 27th and 14th of the month to ensure classified location in the next issue. Copy for new advertisements should reach the office by the 30th and 17th of each month.

TO OUR SUBSCRIBERS.

It is the intention of the publishers of this paper to admit into their columns none but reliable advertisers, and we believe that all the advertisements in this paper are from such parties. If subscribers find any of them to be otherwise, we will esteem it a favour if they will advise us, and we will at any time give our personal attention to any complaints which we receive. Always mention this paper when answering advertisements, as advertisers often advertise different things in several papers.

LETTERS.

Either on business or editorial matters, should be addressed simply "THE NOR'-WEST FARMER, P. O. Box 1310, Winnipeg," and not to any individual.

Look at Your Subscription Label.

When you pay your subscription, watch the name label on the next two issues which you receive. On the first issue following payment, it might not give the correct date—the type-setting machine may make an error and the proof not be corrected before mailing day. But if the date is not correct on the second issue please notify us by postal card.

Look at the date label now. Are you in arrears? Are you "paid up" to the end of 1899? The label will tell you. If in arrears, please renew promptly.

WINNIPEG, APRIL 20, 1899.



POOR WORK.

No one can move around on the farms of Manitoba without soon coming to the conclusion that there is a lot of poor work being done. On many farms there is work that is properly done—even well done—but how often upon the same farm there will be found other work done in a very indifferent way. This is not always because the farmer does not know better, but because he is too careless to do as well as he knows. Poor crops and ill success are more frequently the result of slackness and neglect than of ignorance. We are too apt to put off until to-morrow what ought to be done to-day; and thereby get behind with our work. Once behind we generally have to stay behind, because unable to catch up, consequently crops suffer and other things as well. There is an old adage which says, "Work done in a hurry is ill done." The farmer who is behind with his work is in a hurry, and too frequently the work is consequently ill done. He knows he is not doing it as well as he should, but consoles himself by saying that he is doing the best he can under the circumstances, forgetting that the circumstances are generally of his own making.

Manitoba is a new country, and many have had to make the best shift they could. The development has been rapid, and in the future will be even more so. Methods of work that were satisfactory yesterday are not so to-day. This is an age of progress. Every farmer should study to advance his methods of work every year. Plan for the future. Will your land raise as large crops in ten years' time as it does now? Shouldn't it raise larger crops, if you were farming right? If, under your present method of working it, the prospects are for diminished yields—then, right about face at once. Get into better ways. If you haven't been keeping stock, get some of your oldest and poorest land seeded down to Brome grass, or other good grasses, and add stock raising to your work. If you have been keeping stock, seed down to grass more land and keep more stock; feed and care for them better. Work your remaining land better and get as many bushels of wheat off one acre as many now do off three. Again we say, in closing, the development or improvement in farm work in the near future is going to be very rapid; plan to keep pace with it. Read, study and plan to make your work successful.

A RADICAL PROPOSAL.

J. M. Douglas, member for Eastern Assiniboia, has just introduced, in the House of Commons at Ottawa, a bill dealing with wheat transportation all over the west. It calls for the utmost freedom in loading and shipping wheat at railroad stations, irrespective of the prescriptive rights of established elevators. It fixes a scale of fees for handling grain at all elevators. One quite new feature is the call for a general inspector of the grain trade, whose duty it will be to deal with all complaints of shippers from local elevators. It is evident, from the bill as it now stands, that its proposals are very radical and are sure to meet with a reception more warm than welcome in some quarters.

The proposal for the supervision of country elevators, though new here, has been worked in Minnesota since 1893, and is there known as the "country warehouse law." It was started as an experiment and by most people thought of doubtful utility. R. C. Burdick, at one time chief inspector, an officer of great experience, was appointed to the office. Grain is there bought by grade from the farmers and the dockage for dirt has to be registered, and complaints under these heads are the principal points dealt with by this official, with the right of appeal to the chief inspector. By this means much of the ill-feeling, till then existing between the local buyers and farmers, has been got rid of. On this side, where prices and dockage are a matter between the particular buyer and seller, the necessity for such intervention is not so manifest. But it must not be forgotten that the Minnesota inspection system has been brought to a greater degree of perfection than any other known plan of action, and, in other points now before the public, such as the question of terminal grading, has for years been following the course now contended for by our western grain board.

—All sensible men agree that it pays a farmer to read well an agricultural paper. A prominent stock breeder, whose ad. appears in this journal, recently told us that it was through his farm paper that he received the first impetus to get out of the very well-worn old ruts in which he had been working for years. To borrow a phrase from medicine advertisers, it "made a new man of him."

WESTERN GRAIN INSPECTION.

Messrs. C. N. Bell and C. C. Castle, who were sent east as a deputation from the Western Grain Standards Board to interview Sir Henri Joly, saw him on Monday, the 18th. The resolutions passed at Winnipeg were in substance as follows: They asked for final inspection at Winnipeg instead of at Fort William; for practically permanent standards; that mixing should be done away with; and that inspectors be paid by fixed salaries, not by a fee, as at present.

The two gentlemen officially appointed spoke in support of the resolutions, as did Messrs. Bawlf, Parish, Graham and Crowe. Objections were taken to a permanent standard by Mr. McLaughlin and one or two other grain buyers from Toronto, who also questioned the prudence of a final grading at Winnipeg. Eventually an understanding was come to that should about settle the whole question.

Winnipeg inspection will be recommended, with a reference to the deputy inspector at Fort William for cars reaching that point, off grade or affected by some accident in transit. In no case will he be allowed to raise the grade fixed at Winnipeg. Payment by salaries instead of fees was unanimously agreed to. The management of bins at terminal elevators will be specially provided for. On the basis of this arrangement a bill will be drafted and submitted to Sir Henri Joly, as Minister of Inland Revenue, for his approval, after which it will be brought before the House in due course.

—Let the boys practice making farm conveniences. Spoiled tools and materials cost money, but they have taught some boys more than they learned from books.

—The "agricultural bluestone fraud" exploded here years ago, is now being worked off on the English farmers. A sample analysed showed 90 per cent. sulphate of iron, worth about \$1 per cwt. there. The "bluestone" so doctored is sold at \$7.

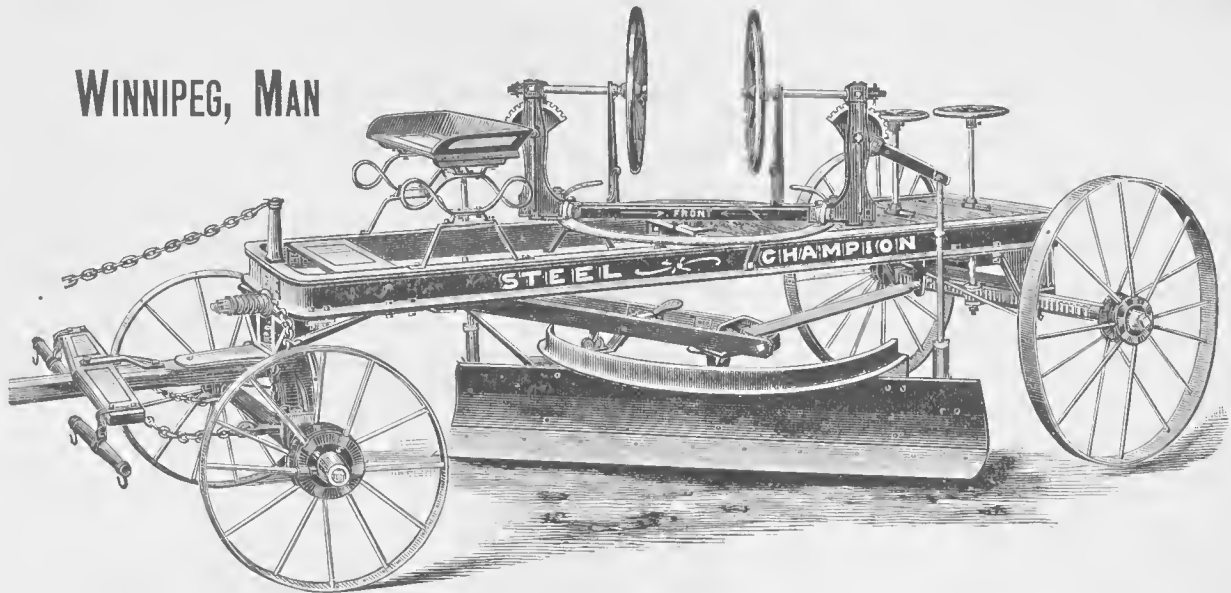
—Farmers are bound to give their farm work more thought as the years go by. Every line of work on the farm will stand a lot of thoughtful study. What we want on the farm is more of the trained thought, such as the business man brings to bear upon his work. Such thought will make the farm pay—and pay well.

—A very influential deputation of English farmers recently waited on the Minister of Agriculture, asking him to recognize the principle of compensation for animals that had to be slaughtered for tuberculosis. He held out very little hope of anything being done that way by the government, and pointed out that mutual insurance was the only thing he could see likely to meet the difficulty.

—There is an agricultural college in Egypt under the shadow of the Pyramids. The oldest farming country in the world is borrowing ideas from the very youngest. In this college are taught the same things as are taught in our best farm schools, and, in addition, one day in the week must be spent by the student in cultivating an acre of ground without help from any one. The proceeds from this land he may dispose of as he pleases. The pupils must be 14 years of age and pass a satisfactory entrance examination. A moderate charge is made for teaching and board.

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Simplicity,
Strength,
Efficiency.
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The Steel Champion Road Grader.

The Champion is KING. As a Ditcher it has no equal. It leads for Cutting Down and Widening Roads. Moves earth to perfection. Lightest draft Road Machine Made. LOOKS WELL—WORKS WELL—WEARS WELL.
The Peer of Road Machines. Write for Catalogue.



While our columns are always open for the discussion of any relevant subject, we do not necessarily indorse the opinions of all contributors. Correspondents will kindly write on one side of the sheet only and in every case give the name—not necessarily for publication, but as a guarantee of good faith. All correspondence will be subject to revision.

Cultivation Points.

A. J. Cotton, Treherne, Man: "In reply to Wm. Kitson, Burnside, Man., re 'How to Seed,' in April 5th issue. Why I harrow the backsetting at least seven times is because in most cases less would not be sufficient to form a good seed bed. Breaking that is followed by backsetting is generally a tough sod and requires extra harrowing. In my experience I have harrowed backsetting twelve times before I had a proper seed bed, by doing so I find it leaves a firm bottom that will not dry out and a fine surface for covering the seed, which also prevents evaporation, two chief points we should not ignore. Again in plowing for spring crops, I have found in my experience that four inches is deep enough to plow new land, land that has only had one crop. To plow deeper than that is not necessary, as you have enough soil to form a good seed bed and a firm bottom, and it is not advisable to draw more plant food from the soil than is required, but keep the rest stored up for future crops. As land becomes older I plow deeper. Spring plow not less than six inches, and harrow three times immediately after the plow to retain moisture. In general farmers do not use the harrow enough, there is too much slip-shod farming done, this one harrowing business is about 'played out.' I believe in raising a good crop and if a little common sense labor will help produce it I believe in putting it into practice. I think it more profitable to grow 25 or 30 bushels of wheat to the acre than 15. I

consider a 15 bushel crop is more exhaustive than a larger one, for where you see a 15 bushel crop you generally see along with it a full crop of weeds, produced by improper cultivation. Such crops are not profitable to the producer and impoverish his land for future satisfactory returns. If each farmer used good common sense in cultivating his land in such a way as to produce good crops, and grew less weeds, his land would be kept in better condition. I, for one would rather raise a good crop than a poor one and I work on that theory.

I would be pleased to hear from Mr. Kitson, through your valuable paper, as to his plan of seeding wheat, oats and barley on fall and spring plowing and from which plan he obtains the best results, as I think his land must be altogether different to what we have at Treherne. I think this would be a profitable discussion for The Farmer, as it is one of great importance."

Note.—Adaptation to the conditions found in the land he is to cultivate is the key note of all Mr. Cotton's ideas. It takes more work to produce his first seed-bed than is wanted on the Portage Plains, therefore he follows a method which an experienced farmer on the plains would think superfluous labor. The better the wheat crop the smaller the chance for weeds is another strong point in Mr. Cotton's creed. Lastly, he tries to cook no more plant food in any one season than his crop can make good use of. Mr. Cotton's past success justifies his policy. Mr. Kitson's methods, many farmers besides Mr. Cotton, will be glad to hear of.

Concrete Buildings.

Chas. J. Drake, Two Creeks, Man., sends the following contribution on cement building. Mr. Drake's father was the inventor of the best system of concrete building ever followed in England.

Norval B. Hager, in answering an inquiry in your paper as to "Building a Concrete House," draws a comparison in the cost of concrete as against stone, brick or frame in Ontario. Nearly everyone is aware that has anything to do with

building with either of these materials that where the materials for concrete are handy it is always the cheapest material to build with, but to build a concrete house near a brickyard and have to pay freight and haul your materials for concrete from a distance, would make it come perhaps more costly. The same thing would occur with regard to the house he refers to, if built here with cement. The 66 bbls. he uses would cost more than double that price here. Lots of good houses, barn foundations, and stables have been built here with lime and made excellent work. The difference in cost between cement and lime for a similar house as quoted would be, if the same amount of lime were used as cement, and it would not take so much lime, this quantity being enough to plaster inside two or three coats and outside one or two coats:—

| | |
|---------------------------------|----------|
| 66 bbls. cement at \$3.00 | \$198 00 |
| 264 bus. lime at 30c. | 79 20 |

Making a saving in favor of lime of\$118 80

Of course one disadvantage of using lime is that it is a slower process and a little is saved in labor by using cement. But even this is questionable, as it is well known that a quick setting cement, if used too rapidly, never reaches the ultimate hardness that a slower setting one does. We have yet to learn whether it would at the end of a thousand years be—as lime concrete has been found to be at that age—as hard as, or harder, than, rock, remains yet to be proved in our experience of hydraulic cement, extending over only fifty years. In Ontario, where the price is, I believe, about one-third of the cost here, they economize by making the walls very thin, a proceeding which does not suit this climate if a cool and warm dwelling is wished for.

Some in reading the foregoing might have the impression that I am not in favor of cement, but that is not so, I am referring more especially to walls of dwellings. There are many descriptions of concrete work, for which lime is of little or no use, such as floors, stairs, water tanks, culverts, etc. What I want more

particularly to point out is the one great error that all concrete builders and cement manufacturers make in advocating concrete, is that it is cheaper than any other building material, when in some cases it is more costly, and thus give the public an erroneous idea. Concrete as a building material is inferior to none other and has the following advantages over brick, stone, or lumber:—

1st. Increased strength.
2nd. Resistance to atmospheric influences, and from its comparative non-absorbent qualities, the capacity of resisting damp and frost.
3rd. Reduced cost in details of construction, more especially in plastering and carpentry.

4th. Durability, from its ultimately becoming crystallized, and instead of deteriorating with age becomes harder and stronger.

5th. Fireproof, when the timber necessary in construction is judiciously arranged.

6th. Impermeability to sound.

7th. Possibility of using non-skilled labor in the preparation of concrete and placing it in the walls.

8th. Vermin proof.

The above list of advantages has special reference to dwellings; but there are other and many varied uses to which concrete may be applied such as stable and barn walls, pavements, roadways, culverts and bridges, stable floors and floors of all descriptions. With such manifold advantages there is no reason why concrete should not take first place as a constructive material, irrespective of its cost.

Sheep Clippers.

B. B. T., Rapid City: "Kindly say where and from whom sheep clippers can be purchased."

Answer.—A hand power sheep clipper can be had from the Chicago Flexible Shaft Co., 158-160 Huron St., Chicago, Ill. Any one having a power horse clipper can readily convert it into a sheep shearing one by purchasing a sheep clipping blade for it.

Wool Exchanged for Cloth.

H. B. H., Solsgirth, Man.: "Can you inform me if any of the Canadian woollen mills will take a farmer's wool, or say 30 or 40 fleeces, and make it up into cloth for him, as they do in Scotland, or if they will exchange cloth for wool on fair terms?"

Answer.—We think any of the woollen mills in Manitoba will do this. But we know the mill at Morden will either make up your wool or exchange it for cloth. B. N. Fraser is the manager of the Morden Woollen Mills. We would advise you to write him.

Dissolving Bluestone.

C. C. Stewart, McGregor, Man.: "Will you kindly inform me what chemical will dissolve bluestone?"

Answer.—Bluestone dissolves readily in hot water and therefore no chemical is needed.

Hartshorn and Wolves.

Referring to the question from J. S. Lundar, A. Hutchinson, White Sands, says: "I have kept sheep in the Yorkton district for 12 years and have never heard of such a scheme to scare wolves. I know a number of men have gone out of the business on account of the wolves, and if hartshorn ever was tried it must have proved a failure. Let me advise J. S. and all others who are troubled by wolves, to keep two or more wolf or deer hounds, and I think they would soon be rid of the pests. There are a number of these dogs around Yorkton and during

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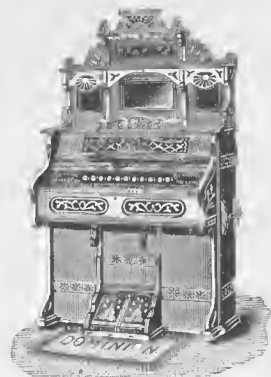


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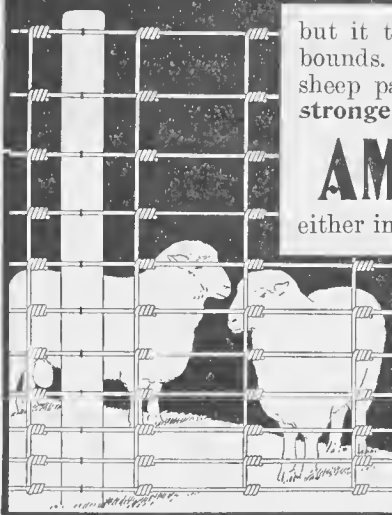
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SHEEP MAY BE DUMB



but it takes a good fence to keep them in bounds. The most successful fence for all sheep pastures as well as for larger and stronger animals is the

AMERICAN FIELD FENCE

either in regular style or special sheep fence.

This fence is most successful because

IT IS THE BEST AS
WELL AS THE CHEAPEST.

Most durable, efficient and economical. If you can't find it at your local dealer's, write direct to us for catalogue.

AMERICAN STEEL AND WIRE CO.,
CHICAGO AND NEW YORK.

the past two winters wolves have been killed by hundreds, so that they are now becoming quite scarce. However, as one wolf is quite sufficient to cause great loss in a flock, it appears necessary to have a couple of dogs always on hand. Even if they do not catch the wolf they inspire him with such a wholesome dread that he is likely to give their home a wide berth in the future. On the other hand, collies and other small dogs seem rather to attract wolves than otherwise. Last summer I kept two hounds and though I never killed a wolf until hay time, it was the first summer for years that the wolves left my flock alone. I parted with the dogs in the fall, and the wolves immediately came back. I do not think this was coincidence, as the same has been noticed by other men."

Note.—We have frequently noted that wolves seem to like a little fun with common dogs, instead of being scared away by them.

Galloway Cattle.

From Olds, Alta., comes the question: "I want information re Galloway cattle. How do they compare with the Shorthorn and Hereford, in hardiness and rustling qualities? Do they make as good a quality of beef?"

Answer.—The Galloways, being developed on a more or less rough soil and in a severe climate, are perhaps the hardest of all our pure bred breeds of cattle, and on that very account, in their native home, they are somewhat slow in maturing. This quality has been greatly improved, however, of late years, by breeders on this side of the Atlantic, owing to conditions more favorable to rapid development. As to their rustling qualities they will compare very favorably with the breeds you mention. No beef brings a higher price on the English market than

that of the Galloway on account of the superiority of the marbling of its flesh, i.e., the mixing of fat through the lean. But being somewhat smaller in size and thus of lighter weight, the heavier breeds have been more generally chosen by the farmer, who was after all the flesh he could grow in the shortest time.

Correct Address.

Reader, Edwell, Alta.: "Reading your article in the last number of The Farmer on Pasteur Black Leg Vaccine, I see you give the address as 61 Fifth Ave., Chicago, while on back cover in advt. it is 59 Fifth Ave. Please say which is the genuine address."

Answer.—Both addresses are correct.

Size of P. Elder's House.

W. H. Gray, Brierwood, Man.: "Will you please give the dimensions of P. Elder's house. Do the front and back stairs come to the same landing?"

Answer.—By reference to the plan at the foot of page 223 you will find the dimensions are 23x27 for the main portion of the house and 17½x19 for the kitchen, a story and a half high. The rear stair opens into a short hall which communicates by a doorway, on the same level, with the landing at the head of the front stair. A rise of one step there leads to the rest of the hall.

Lawn Grass.

Home Maker, Portage la Prairie, asks: "What grass or grasses would you recommend as being suitable for lawn purposes in Manitoba? What is the best method to set out, arrange and keep a lawn in order?"

Answer.—Kentucky blue grass or, as it is often called in Canada, June grass, is the best possible lawn grass, but makes a poor show on the first season if sown alone. Sow rather thick, 30 pounds to the acre and mix a little timothy and white clover. The clover may fail, but is worth trying. Mowing is the best means to keep it in shape and a thin spreading of half rotten manure in fall will do it good both as a mulch and a manure.

Where Carriages Should be Kept.

W. P. J., Pilot Mound, Man.: "A very common and vexatious complaint comes from parties who store their carriages in the same building with their horses, or in damp and close brick carriage houses. This will happen even after the very best material and varnish have been used. Then the owner blames the poor painter, who has endured the stifling fumes of a close varnish room trying his best, and also informs the builder that he is using vile trash instead of a good serviceable varnish, when in most cases they are both innocent, for no varnish ever was made, or ever can be made, that will stand the steam arising in a stable where horses are kept.

Oils by contact with alkali are more or less readily converted into soaps, soluble in water (among the most easily saponified is linseed, used largely in the manufacture of varnish). Oil, when shaken up with a solution of ammonia, unites with it (for it is an alkali), forming a thick solution of soft soap. Ammonia is a gas, and occurs in the air wherever organic fermentation is in progress. When a varnished carriage is exposed to an atmosphere containing ammonia, arising from decaying manure, especially urine, or decaying vegetable matter, the alkali unites with the oil of the varnish, forming an almost imperceptible filament of soap, which, when the carriage is washed, dissolves in the water, and is removed, leaving a fresh surface to be again acted on by the ammonia, so that the oil is gradually removed from the varnish, leaving the brittle gum to look like resin and crumble away. A carriage in continual use should be varnished once a year and kept clean, dry and away from manure."

A Cultivation Problem.

A St. Andrew's subscriber writes: "I have six acres of an old field that has been cropped for 50 years consecutively, with the exception of a fallow that I gave it four years ago. It has since grown wheat, oats and barley—a crop of each. It is full of thistle and French-weed, and some mustard. I want to put it into shape for growing a crop of wheat next year, and while doing so, to get a green crop this fall from it for sheep, and kill the most weeds. I have been spreading manure on it direct from the stable this winter, which will cover about one half of it, and I have enough manure from last year to cover the other half. It was not plowed last fall. How can you advise me as to the best method to pursue, to accomplish what I want?"

Answer.—If that patch were ours we would at once lay it down to grass and save money by letting it lie. It is not possible in one whole year to restore such land to a profitable condition. It is full of two of the worst weed pests and it will take a whole year of skilful cultivation to destroy the thistles. The French weed can only be mitigated, as the soil is full of the old seed and that cannot be worked out in two years. If the land is stirred on the surface all summer every fortnight or oftener, an immense number of the seeds will be germinated and a chance given to the next grain crop to get something to live on.

If required to do our best for that land we would manure very heavily at once and break it up with the harrow. Perhaps those sheep could help. No French weed will go to seed before the middle of May, and just before the first pods show on the top of the seed stems is the time to plow, say six inches deep. The thistles will then be pointing through the ground, and a sure way to kill them is to keep on cutting them by means of some cutting implement, such as a cultivator, as often as they show up. The stems of this year's crop all come up from old-established horizontal roots, in which all the food last year's growths could collect were stored up. If there were no annual weeds you would perhaps not need to meddle with those thistles so often. Most of this year's growth is fed from the roots and the first object of such perennial weeds is to form seed to be carried by the winds to more distant fields. Then side shoots spread out underground all round

the parent stem and will set to work to store up more food till winter puts an end to their work for that season. Such being the life habit of the thistle it is of the highest importance that it should be prevented from forming green leaves above ground, and if that is not followed by cutting the shoots as often as they show up there is small prospect of their being conquered. But every time the thistles are cut, another batch of the seeds of your annual weeds will start growing and be killed. To try for a green crop this fall is only to spoil your chance of getting the better of those weeds, but if you keep at the thistles all the year you may see no more of them and the annuals will be a good deal knocked out as well. We would not grow wheat there next year. A crop of barley would be better as a means to weed killing. To kill thistles cut below ground, to kill French weed, keep on harrowing till November.

BEFORE YOU BEGIN

to paint anything, a hitching post or a house, a barn door or a parlor floor, see that you have the right paint for that particular purpose. No paint has ever been made equally good for painting everything—buggies and houses and furniture. The greatest triumph of modern paint-making is the making of a different paint that looks best and wears best for each class of painting. It has taken years to find out just what ingredients and what proportions are needed for each. Each must be ground and mixed by special machinery with the utmost skill and accuracy. If you go by the labels on the cans of

THE SHERWIN-WILLIAMS PAINTS

you are sure of getting the best that can be made for your purpose. They have a reputation of 30 years' success, and every can is fully guaranteed. Our little book on painting will help you—it is free.



THE SHERWIN-WILLIAMS CO., Paint and Color Makers.
Canadian Dept., 21 St. Antoine St., Montreal.

GOOD FARM FENCE

should turn all kinds of live stock and even traps; should expand and contract according to the weather so as always to be tight; should stand all storms—even fire and last indefinitely.

The Coiled Spring Page

Is just such a fence.
Its virtue is attested by the fact that there is more of it in use than all other makes combined. Prices lower than ever this year.

THE PAGE WIRE FENCE CO., (Ltd.)
Walkerville, Ont.
Or DAVID ROSS, N. W. Agt.,
Box 855, Winnipeg.

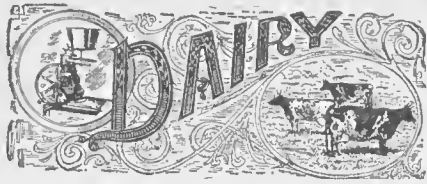
FREE



FOR ONE DAY'S WORK

WE GIVE this fine WATCH, with a chain and charm, for selling 2 dozen gold-topped, enamel-backed Lever Collar Buttons at 10c. each, or a lady's watch and guard for selling 3 doz. *No Money Required.* You run no risk. Write and we send the Buttons, post-paid, with our big Premium List. Sell the Buttons, return money, and we send watch, *free of all charge.* Unsold buttons returnable. Liberal commission if preferred. Be the first in your field. Send your name and address to-day. In writing, mention this paper.

LEVER BUTTON CO., TORONTO, ONT.



Churchbridge Creamery.

Churchbridge is a little settlement on the M. N. W. Railroad with a little creamery operated under the Dominion Government scheme and the secretary, Harry Roberts, sends us a report of its last year's business, that better known places may well take note of. This creamery has 70 patrons, most of them Icelanders and Germans, and their average production of cream last year was under \$40 worth. The highest contributor got \$94, the lowest three averaged \$8. Their total season's output was only 21,430 inches, but they were fortunate in their butter maker, J. W. Mitchell, who, we understand, is to succeed Mr. Kinsella, as superintendent. He turned out 22,223 lbs. of butter, 800 lbs. more than a pound for an inch of cream, and the average price was 13.85c. The creamery was less than four months

Kinsella Goes to New Zealand.

The reputation of Canada as an advanced school for dairy science and practice is every year becoming more fully established. We sent back to Scotland years ago, in the person of Mr. Drummond, a man capable of holding his own and giving points to the best of them in that old-established dairy country. Then New Zealand sampled our quality in the person of Mr. McEwen, and came back last year to secure Mr. Ruddick. That colony wants to do a leading share in dairy production, and called next for Mr. Kinsella. He declined their first offer, which they amended to his satisfaction and he goes too. His place as superintendent in the Northwest Territories will be filled by J. W. Mitchell, whose work last year at Churchbridge gave such great satisfaction.

Process Butter.

One of the very latest achievements of American genius is the process by which butter, that has gone rank and unfit for use, is put through a secret process of renovation and again put on the market as fairly palatable to appetites not too fas-

make so much better butter than can be made in a private dairy, but because the product of a district as gathered and manufactured in a creamery, is uniform in color and quality—a thing that can never be attained where each farmer makes up his own butter. A large quantity of dairy butter in any country only tends to make possible such a thing as process butter.

Lime for Mouldy Creameries.

Creameries that were troubled with mouldy butter last season should have all the woodwork thoroughly disinfected! A very simple plan of doing this is suggested by the following note from the Scientific American:—"Unslaked lime is best suited for removing mould in cellars. It is blown, in the shape of a fine powder, on the walls of the cellar, and into the joints and crevices by means of the bellows, or else thrown on with the hand. The walls must be damp, dry walls have to be moistened previously. The lime slakes with the adhering water and kills all organisms. On the day following the walls are washed off, and, as experience has proved, the cellar will remain free from mould for at least two years."

If this were done before the season's work was begun and then preparations made to have lime water ready for washing with, as explained by Mr. Marker at the Dairy Convention, there should be no room for complaint about mould in any creamery.



Churchbridge Creamery.

in operation. In detail we find the 18.85c. got for the butter was laid out as follows:—

| | |
|--------------------------------|---------|
| Paid to patrons | 12.20c. |
| Paid for hauling | 1.65c. |
| Paid for making | 4.00c. |
| Assessment for loan fund | 1.00c. |

Total 18.85c.

For a small creamery this is a record seldom approached. At Yorkton, where nearly 40,000 lbs. was made in 4½ months, the price realized for butter was 18.26c., divided as follows:—

| | |
|--------------------------------|---------|
| Paid to patrons | 11.26c. |
| Paid hauling | 2.00c. |
| Paid making | 4.00c. |
| Assessment for loan fund | 1.00c. |

18.26c.

We have special pleasure in quoting the Churchbridge record, as it may prove the means of stirring up a spirit of rivalry in the farmers of more favored districts to the possibilities of carefully managed creameries.

C. C. Macdonald, Dairy Superintendent for Manitoba, is holding a school for cheese-makers at Hochstadt.

tidious. Even in Elgin, the capital seat and centre of the creamery industry, one of these factories is now in regular work. So successfully can this process be worked that its output has come into sharp competition even on the home market with the genuine article. It is already anticipated that this peculiar variety of butter will also be pushed on the foreign market. The result of this will prove disastrous in two ways.

The new product may taste fairly good for a few days but quickly goes off flavor, and the dealer on the other side is likely to find himself loaded up with vile stuff that even the poorest will not buy. The buying public will then promptly break out in denunciations of Yankee villainy and give up buying even the genuine product of the creamery. How to get over the difficulty is a question that is now giving considerable anxiety to the American Department of Agriculture. Meanwhile the States of New York and Minnesota have passed laws to try and head off the process butter fraud and other dairy states will follow their example.

Although we do not know of any such establishment in Canada there is no telling how soon one may be started. Manitoba can help postpone that day so far as the west is concerned by patronizing the creameries, not because the creameries can

In the report of the local Dairy Conventions in these columns in last issue, it was stated that Mr. Harcourt's address, "How to Obtain a Good Dairy," would be given in this issue. We are unable to do so, as extra advertising matter has limited our space.

It does not pay to have poor milkers milking your cows. Some men cannot milk if they try, and there are more that won't try. It is easy for them to let the cows down in their milk, then there is less labor milking them. Some dairymen give prizes to the milkers who secure the best results.

It is a thing of beauty and a joy for ever to see the way calves will grow when fed skim milk warm from the cream separator. Calves will do better on this milk, with the natural warmth in it, than they will on sweet skim milk artificially warmed and having as much as 1 per cent. of butter fat in it.

The other day a couple of cows belonging to a farmer at Balcarres, N.W.T., were settling a little dispute and one of them backed into a 50-foot well that stood handy. There was four feet of water in the bottom. A derrick was hoisted over the well and the cow, after a few hours' cooling, was got out, not seriously the worse of her awkward drop. Moral—a well is an unhandy thing to leave uncovered in a barn yard.

Every little while we hear and read that warm milk does not take in foreign odors so long as it is warm and that it is only as it gets cold that it does so. Professor Russell, of the Winconsin Experiment Station, recently took in hand to find just how much truth there is in this opinion. He found that milk at blood heat absorbed foreign odors much more readily than when it was cold. He tried it with several things, including urine from cows, horse manure and essential oils, all of which led to the same result and directly contrary to the generally accepted opinion.



A Wheat Growers' Convention.

A few weeks ago a convention of the three wheat growing states of Minnesota and North and South Dakota was called at Fargo, and nearly 800 representative farmers responded to the invitation. Chas. Braithwaite was present to speak for Manitoba. Half a dozen professors represented the state agricultural schools. Everybody is apparently satisfied that continuous wheat-growing must be shut down on and some form of rotation adopted if farming is to prosper in the great Red River country. There was much talk on weeds and on rotation. Professor Hays suggested corn as one kind of alternate crop. Grasses, timothy preferred, were also approved of. Perhaps if all the truth were told they are behind ourselves in their knowledge about seeded grasses, though for a two years' rotation crop it may be best on any clay land. For a short rotation Brome will not pay.

The gluten contents of their wheat is falling off and more care of the quality and weight of their seed was the remedy pointed out. Mr. Clausen, chief grain inspector, wrote saying that if low grade wheat was grown it must be dealt with on its merits. More foul seeds are grown every year, carelessness about the quality of the seed is another serious evil and farmers must brace up to deal with these difficulties in a practical way.

The convention lasted three days. On the last day President J. J. Hill gave a long and interesting address. Wheat, in his opinion, must always be the staple crop, and the growers must study the methods by which it can be made most profitable. More thorough work and stock-keeping, hogs included, are the means to that end.* The manure spread over the land is worth one-third the value of the feed consumed by the stock, and it will bring you back one-third its value of wheat, if used intelligently. The sooner you realize this, the sooner you will be satisfied with your work."

At present foul seeds enough are sent out to supply fuel for all the elevators and feed 150,000 sheep at Superior and St. Paul. There has been kicking of late against the grades for wheat given by the state inspectors, but the standard cannot be lowered to suit careless and incompetent farmers. Nobody can ensure paying prices, they are fixed by the rule of supply and demand on the world's markets. But we can hunt up new markets. One bushel a head to the population of these countries would take all the spare grain of the U. S., and the government should spend money trying to open up those markets and get low rates of freight for the wheat from the Pacific slope to the far east. If the government gave a bounty on all wheat sold there for the next few years it would do more for the country than fooling away money on the Red River and upper Mississippi navigation. One great evil looming in the future is the multiplication of trusts, which unless checked in some way, must imperil the future well-being of the nation. In conclusion, Mr. Hill offered free transport on his road to all farmers who want to see the agricultural college and investigate its work. "Whatever benefits you must bring profit our way. Our interests are with the farmers. Unless you are prosperous we cannot be, and if you don't make money we can't get it. Our

interests are identical. However much men may tell you that we are holding your nose to the grind stone and taking all you get, that fact still remains. The farmer and the railroad must prosper or be poor together. There is no other interest amounts to one-fourth as much to us as the agricultural interest, and we shall always be ready to do what we can to put you on the road to intelligent prosperity. If you can't live and be prosperous you won't stay where you are, and our interests demand that you do."

Formalin for Wheat.

Owing to the shortage in the supply of bluestone there may be some places that are without this useful remedy for smut in wheat. Mr. Bedford strongly recommends formalin for smut in oats, but has not tried it for wheat. Our American friends, however, have given formalin a thorough trial on wheat and recommend it. The U. S. Department of Agriculture has issued printed instructions in regard to its use. The proportions given are one pound of formalin in 50 to 60 gals. of water. Practically the proportions used by Mr. Bedford for oats—3 to 4½ ozs. for 10 gals.

The U. S. Department of Agriculture advises soaking grain for two hours in the solution. Mr. Bedford tried soaking oats for two hours, and for various lengths of time down to five minutes. He found just as good returns from that time as from two hours. As oat smut is more difficult to kill than that on wheat, we would think that five minutes soaking for wheat, or, to make sure work, ten or even fifteen minutes would be all that is required. The grain should be enclosed in bags made of cheese cloth or other open fabric which will allow free passage of the liquid through it. The formalin of commerce is sold wholesale at about 50 cents a pound and should be obtained retail at about 75 or 80 cents. As the liquid can be used over and over again it should be a very cheap remedy for smut.

Carberry fair will be held on August 3 and 4, this year.

The United States Department of Agriculture has received a valuable consignment of grains grown in Northern Russia. These will be sent out for experimental planting.

California has just passed through a six months severe drought. A plot of Brome grass came through this drought without losing a single plant. When the rain came the grass revived quickly and soon made a growth of two feet. Its roots penetrate deeply in search of moisture and this makes it a good grass for withstanding drought. Western range men are being convinced of its value for reseeding the barren plains of the Western States and Texas, and thus turning them again into money-making pastures.

LITTLE'S PATENT FLUID

NON-POISONOUS SHEEP DIP AND CATTLE WASH.

The Original Non-Poisonous Fluid Dip

Still the Favorite Dip, as proved by the testimony of our Minister of Agriculture and other large Breeders.

FOR SHEEP.

Kills Ticks, Maggots; Cures Scabs, Heals Old Sores, Wounds, etc., and greatly increases and improves growth of Wool.

CATTLE, HORSES, PIGS, Etc.

Cleanses the skin from all insects, and makes the coat beautifully soft and glossy.

Prevents the attack of Warble Fly.

Heals Saddle Galls, Sore Shoulders, Ulcers, etc. Keeps Animals Free from Infection.

NO DANGER, SAFE, CHEAP AND EFFECTIVE.

BEWARE OF IMITATIONS.

Sold in large tins at 75 Cents. Sufficient in each to make from 25 to 40 gallons of wash, according to strength required. Special terms to Breeders, Ranchmen, and others requiring large quantities.

SOLD BY ALL DRUGGISTS.
SEND FOR PAMPHLET.

ROBERT WIGHTMAN, Druggist, Owen Sound.

Sole Agent for the Dominion. 1874

INDIAN CORN.

Yield per Acre at the several Experimental Farms for the Season of 1898 :

| NAME OF VARIETY. | Ottawa. ONTARIO. | Nappan. NOVA S. | Brandon. MANITOBA. | Indian H'd N.W.T. | Agassiz. BRITISH C. | Average of All Farms. |
|--------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------------|
| | PER ACRE. Tons. Lbs. | PER ACRE. Tons. Lbs. | PER ACRE. Tons. Lbs. | PER ACRE. Tons. Lbs. | PER ACRE. Tons. Lbs. | |
| RED COB ENSILAGE. | 24 1170 | 18 300 | 27 1440 | 14 1964 | 33 1375 | |
| Early Mastodon | 24 1,060 | 21 1,450 | 27 120 | 8 764 | 29 1,400 | 22 558 |
| Cloud's Early Yellow | 24 473 | 12 1,850 | 27 1,000 | 12 420* | 26 1,460 | 20 1,440 |
| GIANT P. ENSILAGE. | 22 1100 | 16 1550 | 25 380 | 15 492 | 38 450 | 23 1194 |
| Early Butler | 21 1,340 | 12 970 | 24 1,940 | 12 552 | 28 100 | 19 1,780 |
| Evergreen Sugar | 21 900 | 11 550 | 14 160 | 6 540 | 16 1,000 | 13 1,830 |
| Rural Thoro. W. Flint | 20 1,800 | 23 1,850 | 29 1,840 | 18 620 | 23 200 | 23 462 |
| Champion W. Pearl | 20 247 | 16 1,220 | 21 1,560 | 16 1,264 | 28 1,760 | 20 1,610 |
| Sanford | 20 113 | 20 1,800 | 23 200 | 13 1,720 | 22 1,100 | 20 186 |
| SELECTED LEAMING. | 19 1380 | 14 1150 | 19 1160 | 13 796 | 22 220 | 17 1741 |
| Pride of the North | 19 940 | 15 1,350 | 24 1,500 | 9 742 | 29 80 | 19 1,322 |
| White Cap Yellow Dent | 19 170 | 17 1,200 | 28 1,200 | 12 1,740 | 25 160 | 20 1,294 |
| Extra E. Huron Dent | 18 1,180 | 15 1,020 | 23 200 | 11 572 | 25 1,921 | 18 1,778 |
| Mammoth Cuban | 18 80 | 16 1,770 | 20 1,800 | 9 216 | 20 1,800 | 17 333 |
| King of the Earliest | 17 1,200 | 17 100 | 19 940 | 10 1,730 | 24 1,610 | 17 1,263 |
| Mam. Eight Rowed Flint | 16 1,440 | 16 1,770 | 24 840 | 11 968 | 24 1,000 | 18 1,603 |
| North Dakota White | 15 1,240 | 16 1,770 | 22 1,100 | 8 236 | 22 1,320 | 17 333 |
| Longfellow | 14 1,920 | 17 650 | 23 1,030 | 10 1,334 | 19 1,600 | 17 526 |
| Pearce's Prolific | 14 1,118 | 17 1,200 | 25 600 | 9 1,800 | 24 1,000 | 18 742 |
| Angel of Midnight | 14 1,060 | 16 450 | 24 1,720 | 11 1,233 | 21 900 | 17 1,472 |
| Compton's Early | 13 180 | 16 1,550 | 25 1,700 | 14 1,548 | 24 1,500 | 19 99 |

The above varieties in large type speak for themselves. They are handled by E. R. Ulrich & Sons, Springfield, Illinois, U.S.A. Ask your dealer for ULRICH'S SEEDS when buying.



Western Manitoba's Big Fair at Brandon will be held this year July 18 to 21, and the directors will endeavor to eclipse the success of previous years by increasing the prize list and also arranging for still greater accommodation for exhibits. This fair has now gained such a record that it is looked forward to with pleasure by breeders, exhibitors, farmers and the public in general as the great holiday and event of the season. The grounds are situated in close proximity to the City of Brandon and therefore easy of access. They are laid out and planted with trees and shrubs, making it a delightful place to spend a day pleasantly, even if there were nothing else, but here also will be found commodious buildings of the most improved designs for all kinds and sorts of exhibits. Moreover the subsoil being gravelly, and the grounds naturally as well as artificially drained, water never lies for any length of time, but is quickly absorbed or run off, so that in ten minutes after a heavy rain the grounds are dry again. The prize lists will be ready for distribution the first week in May, and many new features will be found therein. Special prizes will be offered in almost every class, which will call out keen competition. Among others, the Lake of the Woods Milling Company is donating \$25 for the best home-made 2lb. loaf of bread, made from any flour. Such an attractive prize as this, and within the reach of all to compete for, is bound to bring out hundreds of competitors. The directors are presenting a free ticket of admission to every scholar under fourteen years of age who has a good behaviour and attendance record for the two months previous to the fair.

The Great Health Restorer.—Many at this time of the year are complaining of feeling weak and debilitated and do not know what is the matter. It is comforting to know that there is advertised in our columns a superior preparation called Dr. Pearson's English Hypophospherine, which is the great health restorer for the weak and afflicted. Hundreds in the city and in the country can testify to its merits in neuralgic pains, nervous and sick headaches, debility, weak digestion, sleeplessness, agues, fevers, colds, grippe and its bad effects, and in weakness of the generative organs it is most invaluable.

The Aylmer Iron Works, Aylmer, Ont., have placed an advertisement with us for their useful spraying pumps. These pumps are made of the best material and are invaluable for whitewashing buildings inside and out, spraying trees or the inside of the creamery. Farmers are now using them to spray mixtures on their cows to keep away flies during the fly season. If this is done twice a week the cows will stand at milking time and give more milk because not worried by flies. There is a great future for spray pumps along this line.

The Canadian Dairy Supply Co., of Montreal, Que., are opening a supply house in Winnipeg in order to handle all lines of their famous De Laval cream separators, which have been handled in the past by a commission house. We would call attention to their opening advertisement in another column.

D. B. Macleod, general agent for the J. I. Case Threshing Machine Co., is apparently wide awake to the needs of his customers, judging from the extensive

and permanent improvements he is having made at the company's headquarters at Winnipeg for the proper handling of their machines and repairs.

The Brandon Marble and Granite Works have received the contract for the erection of a monument to the memory of the late Alex. Fleming, M.D. It is to be over 25 feet in height and to be made of Manitoba native granite.

D. A. Reesor, The Jeweller, Brandon, has a new advertisement in this issue, which will be found on the front cover.



THE HOME ON THE FARM

Should be comfortably furnished.
Comfort need not mean extravagance, if you buy right.

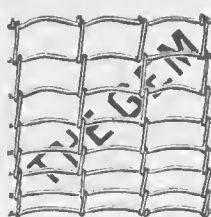
3 CATALOGUES FREE.

- No. 1. Furniture.
- No. 2. School Desks.
- No. 3. Baby Carriages and Wagons.

Scott Furniture Co.

WINNIPEG.

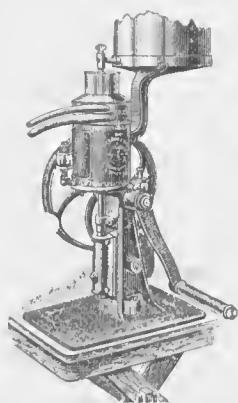
Largest Dealers in Western Canada.



FENCE MACHINE

is especially adapted for fencing in the Northwest. It will weave on any kind of wire, including barb, will weave heavier wire and more in a day than any other machine made. PRICE \$5.

Call on
M. A. FERRIS, P. LA PRAIRIE, AGENT,
Or write MCCREOR, BANWELL & CO.,
WINDSOR, ONT.



TO THE DAIRYMEN OF Manitoba and N. W. T.

We beg to call your attention to our having opened a branch of our business at Winnipeg, where we will carry a complete line of all articles required in the manufacturing of Butter and Cheese for either Creamery or Dairy, and at such prices as will save you money.

Heading our list of goods stands the DE LAVAL-ALPHA Power and Hand Separators, which are considered by all dairy and creamery authorities to be the best ever placed on the market.

Our object in opening this branch is to be nearer the dairymen of Manitoba and the N.W.T., so as to be in direct communication with those who have favored us with their patronage in the past, and also to be in position to better take care of our old as well as new customers.

The DE LAVAL-ALPHA machines are known the world over as the best constructed and most durable Separators in the market, and we shall be pleased to demonstrate this fact to any one interested, either by a public competitive test with milk at any and all conditions or we will allow anyone contemplating buying, a full trial of our machines before purchasing. Bear in mind that the cheap machine, incapable of doing thorough work in the end, becomes a very dear article.

For particulars address:

THE CANADIAN DAIRY SUPPLY CO.,
236 King Street, Winnipeg, Man.

ORDER YOUR

SEEDS NOW.

Our new Catalogue, which is sent you for the asking, tells you all the very best varieties for growing in Manitoba.

They are just as cheap as Eastern seeds, and produce more.

Send us your name.

FLEMING & SONS,
BRANDON, MAN.



FREE.

We give this fine Watch with a chain and charm for selling 2 dozen packets of our exquisite Perfume at 10 cents each, or a lady's Watch and guard for selling 3 dozen. *No Money Required.* You run no risk. Write and we will send the Perfume postpaid and our Premium List. Sell the Perfume, return the money, and your Watch will be forwarded at once, all charges paid. Unsold Perfume may be returned. Hundreds have already earned valuable Watches selling our goods, why not you? Mention this paper when writing.

The Home Specialty Co.
TORONTO, ONT.

WHEN YOUR WATCH REQUIRES REPAIRING

Send it to

Andrew Co.

Jewellers,

420 MAIN ST., MCINTYRE BLK., WINNIPEG.

Drop us a postcard for a wooden mailing box, **FREE**. Please mention this paper.



The Farmer's Garden.

By Mrs. S. Larcombe, Birtle, Man.

The praises of the farm are sung
In many a round-e-lay,
But cattle, horses—no nor crops—
Shall be my theme to-day.

If you've a piece of well-tilled land,
Or some that you can spare,
Just try your hand at gardening—
'Twill well repay your care.

First, get some good and fertile seed,
Your land then next prepare,
With spade and hoe and rake and line,
All level, fine, and square.

The next is such a pleasant task,
The seed you sort with care.
Cabbage, tomato, cauliflower,
Turnip, and pumpkin rare.

Onions, too, of many a kind,
Seedsmen are offering now;
Cucumber, and celery fine,
You sow them row by row.

Then patiently wait a week or two,
And you will surely see
The little green thing peeping out
As thick as thick can be.

'They'll quickly grow, and you will find
Your work each day will be
To clear the weeds where'er they show,
And keep the young plants free.

Then, as the summer days draw on,
And frequent are the showers,
Pleasure and work go hand in hand
Throughout the sunny hours.

And now reward for all your toil,
Will gladden and surprise,
As day by day you sumptuously
Regale on pumpkin pies.

Or, salad, sweet, your palate greets,
When ninety in the shade,
Or, with cucumber varying,
You'll amply feel repaid.

And later, when cold winter comes,
Your cellar well is stored
With cabbage, roots, and many things
The garden well will afford.

Of course, I would not interfere,
So ask the farmer's pardon;
And say that he should do his best
To have a farmer's garden.

Tree Planting.

By H. C. Robey, Horticultural Foreman,
Brandon Experimental Farm.

Spring, the most beautiful time of the year, has now arrived, and the planting season in the Northwest is very short, the buds bursting so quickly that, almost before we observe it, the trees are in full leaf, and the opportunity of planting is lost for another year; for it is only possible to plant trees with any degree of success while they are in a dormant condition.

When we have made up our minds to beautify our homes by increasing our plantations of trees and ornamental shrubs, or in laying out the plans for a future plantation, the first thing to be considered is the purchase of hardy specimens from a reliable nursery — for nursery-grown trees are always preferable on account of

their superior root development. Trees raised under the same climatic influence that they are afterwards to withstand should be procured if possible. It is also well not to allow oneself to be coaxed into buying imported tender stock from agents of an eastern nursery on the representation of highly colored plates. Many have been deterred from planting beautiful and hardy trees by the fear of non-success, caused largely by the planting of tender trees introduced in early days by unscrupulous agents, who, after capturing their commission, had no further thought of the trees they had misrepresented, nor of the harm they were doing to future arboriculture in the Northwest.

The modus operandi of planting with success is as follows: Dig holes one foot in diameter larger than the roots of the tree to be planted, and about six inches deeper than is necessary; fill up this six inches again with good surface soil. Now place the tree in position, being careful that the fibrous roots are not matted, but are extended in natural positions. The long tap root of varieties, such as the maple, should be cut off with a sharp knife, as also the bruised ends of any side roots. This causes them to quickly callous, and no evil effects from rotting will take place. Now shovel the hole half full of nicely pulverized top soil, taking special care that it is well tramped, and that the tree is firm, for in this much of the success is due. A pail or two of water is here beneficial; then fill with dirt to the level of the surrounding ground, but do not heap it up around the tree. This part of the work being now completed, it is well to prune to a desired shape. It must be borne in mind that in lifting the tree some of its roots have been destroyed, so it is necessary that some of the top be cut to make up for the corresponding loss of root.

In hedge planting use two or three-year-old trees. Dig a trench, or plow a deep furrow; plant the young trees fifteen to 18 inches apart; then prune back to a uniform height of about 15 inches. They will then make a desirable thick bottom growth. Weeds should never be permitted to grow.

A great deal of the future welfare of the trees now depends on proper cultivation, and surface culture should be kept up with hoe, or horse implement, through the growing season. Much of the future success is due to this.

In planting seedling trees, it is well to take them to the field in apail of water, as the tender roots are quickly injured by exposure to sun and wind. This is especially true of the evergreen varieties. These have often received their death warrant before reaching the hands of the planter, by being what is technically called "gummed." That is, the resin in the sap solidifies, and as it cannot be dissolved, the roots are choked and the plant dies.

If, on receiving trees, it is not convenient to plant them, they should be carefully "heeled in." This is performed by digging a trench large enough to hold the roots, throwing all the earth on one side. Now lay the trees down with their roots in the trench close together and their branches at right angles to the trench. Throw on damp earth and tramp firm. They can be preserved in this way for several days.

The limbs of all trees that have been frozen back should be removed, so as to allow of free growth and more ready healing.

All broken branches should be cut out of trees now. Those shoots or limbs that are growing faster than the rest should be cut back so as to keep the tree top symmetrical.

School children should be taught to take a pride in their school grounds. A little effort on their part will soon convert the desolate bare ground into a thing of beauty and a joy forever.

Arbor Day Work.

Everybody that is anybody would like to own nice trees, either singly as ornaments, in rows, or in the form of shelter belts. In deference to this sentiment "Arbor Day" has been started and kept going in the country to the south of us for a good many years, and here in Manitoba the government issues an annual proclamation, setting aside a suitable day for the same purpose. Arbor Day will this year be observed on May 5th, and if a good many of our citizens plan to observe it heartily, it will afford in future years a much pleasanter retrospect than if they had betted on the wrong horse at the spring race meeting.

For deciduous trees the date fixed by the government is likely to be pretty suitable. For spruce it is not material whether we plant in May or June. Just when the buds are beginning to open in spring is the very best time to plant. Whatever may be the rule elsewhere, no tree should be planted here in the fall. If the leaves are allowed to form before we move our trees, it will weaken the plant and injure its chances of success. Try to hit the golden mean.

The proper preparation of the soil is of first-rate consequence. New land will not do. It must have had two year's cultivation, the deeper the better. To begin planting on any land with insufficient preparation is, in this country, to ensure permanent failure. Should the land on which it is intended to plant not have been well-worked or partially exhausted by cropping and shallow cultivation, better wait a year. Plow deep the first time you have to spare, give a dose of rotted manure, and then plant potatoes on the flat every third furrow. This will leave a fine mellow soil, in which any tree properly planted will do its level best the following year.

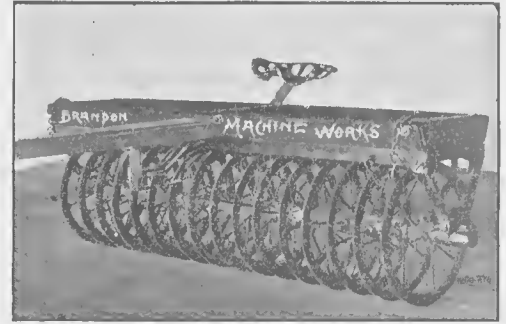
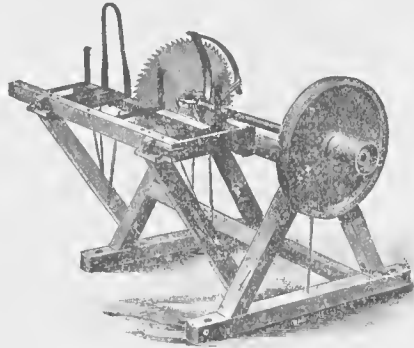
The selection of trees is not a difficult matter in this country. For easy raising, after management and rapid growth the native maple, sometimes called box elder, has no equal. But for a tree meant to last, the native elm is best. That and a few white ash should be dotted in at suitable intervals among the maples. When meant for a shelter belt, the trees should be planted in rows six feet apart and three feet the other way. It is better to have them so close, and take one out a few years after, as when too far apart they grow bush form, and need far too much after pruning.

On our bare prairies, maples get badly broken by the snow, and to avoid this the outside one or two rows should be allowed to grow low and close. If outside of these a space of say 30 feet is left and a double row of free-growing willows set in, most of the snow will collect in the open space without breaking down the more flexible stems of the willows. Henry Nichol, north of Brandon, is one of the men who have found this plan work to great satisfaction. The strip between the two lines of trees can be worked to advantage as a garden, or calf pasture. By trimming over the outside row of maples to a height of say four or five feet, a stock-proof fence can be got in a few years.

How to plant is an important question. For those who are fully occupied with farm work, the cheapest and most satisfactory way is to contract with some reputable local nurseryman to provide and plant one or two-year-old trees at distances to be agreed on. By running a deep plow furrow in well-prepared land, young trees can be laid in with the left hand and the roots covered by the right foot at a rapid rate, and if the soil is moist, as with good preparation it ought to be, and firmly tramped down, very few plants will be lost. The plants should be looked over in some cool moist place, and the tap roots trimmed off. The furrow should be made deep enough to allow the plants to go well into the ground,



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As little air as possible should get at the roots when out of the ground, and if it is a dry day when planting, the plants should be kept in a good big tub, in which a little fine earth has been mixed with water. These precautions ensure subsequent hearty growth, and as it would take a lot of after-watering to go over any quantity, the first setting out should be done with proportionate care. When yearling plants are used, planting may be done by setting a long line, and at suitable intervals opening a cut with a spade into which a boy sets a plant, shoves the soil into the hole and tramps it down firm.

There may be cases in which it is desirable to introduce a greater variety of trees. If young native spruces can be found within say 40 miles, a good wagon load collected in May or June would give agreeable variety. They must be dug, not from dry sandy soil, but low-lying rather damp places, with a good-sized turf round each root. If taken from a thicket the trees will be too tender and unfit for a more exposed position, and solitary plants will be too hard. Collect where growth is free and not too crowded. When loading, they should be set out on damp straw, as very little drouth kills them.

The holes should be 3 in. below the general surface after the plant is in place. It is well to soak underneath the turf before planting, as well as to water on top after the ground has been levelled up with enough earth to cover the sod in which the tree grows. A mulch of chips and dirt over the roots will save after-watering. The plants may be from two to ten years old, and their after success will depend very much on the care given when moving and planting.

Where only a few special trees are to be put in, as on Arbor Day, and the soil preparation has not been attended to, it is still possible to make a good job. A wagon load of good garden mould would suffice to plant a score or more of good-sized plants. Dig the hole deeper and wider than is wanted for the size of tree, and put in say three inches of earth. Then water and set in the tree with as few of its fine fibres injured as possible in the taking up. Spread the roots all round after neatly trimming off any that were bruised or broken, cover with a little more mould, then common earth, then water, leaving a little mulch on top, and staking to keep the tree from moving in the wind.

When a tree of any size is to be set out, it is often necessary to trim off part of the branches. Nursery trees of any age are far more suitable than those taken from a wild bush, for this reason. A wild tree throws out running roots to forage for the food that it cannot find nearer home, and it is mainly at the extremities of those roots that the fine rootlets, by which its food is taken out of the soil are found. By cutting the main roots of a wild tree within say 18 inches of the main stem, most of the feeding roots are cut away, and, if the branches are not reduced within the capability of the roots to feed them, the tree will go back, and very often will die. But, even for nursery trees, with shorter woody roots and a greater wealth of fine rootlets, it is also desirable to have the tops reduced in size. The material for the earliest growth of leaves was all stored up last fall inside the bark, but when the feeding roots should be ready to draw from the soil food for the continuation of leaf growth, the drain upon them is too severe, and the best way to even things up is to keep the top growth well within bounds, so as to avoid exhaustion later on in the year. Many newly set out trees look well enough for a short time, then die off for this reason.

It is only by giving reasonable attention to points, some of the most important of which we have here indicated, that any good can result from tree planting. Some apparently trifling oversight may spoil the whole job and make the planter give up in disgust. One such point may be mentioned here. There may be a little patch of couch grass somewhere on the land to be planted, and in course of preparatory cultivation its roots scattered pretty widely. In a few years those roots will have formed a thick rank growth of grass all through, that will injure tree growth considerably. A coat of manure, thickly laid on will keep that grass down, but it is better to avoid letting it start.

Professor King, of Wisconsin Experiment Station, who has paid a great deal of attention to the matter, says he has demonstrated by actual test that a grove has a very remarkable effect in reducing the evaporation from lands on the side sheltered from the wind. If the protected side is also the sunny side of a woodland the temperature of the air for 20 to 50 feet from the wood will be higher, but not enough to make the air less moist or to increase the rate of evaporation above what it would be if the influence of the trees was removed.

Gooseberry and currant bushes should be looked over and all dead and broken branches cut out, also the old wood.

All last year's dead canes should be cut out from among the raspberry bushes. Trim up the canes left and leave only five or six in a hill.

Trees that have been barked by the mice should be seen to as soon as the sap starts. If the girdling has not been all around, there is some hope of saving the tree. If not too bad, bind up with grafting wax or clean cow-dung has been often successfully used; tie up in old cloths. The idea is to keep out the air. If only a small piece is girdled, sometimes by fitting in a nice piece of bark of the same kind of wood the place may be successfully covered. Get the two inner layers of bark together and exclude the air. Or a strip of bark may be run up the girdled portion, uniting the bark above with that below. It is worth the trouble to try to save the tree. If girdled all the way around, there is not much hope of saving the tree.

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Successful Institutes and Some of Their Officers and Plans.

The story of the Institutes is continued in this issue. The accounts of some of these as they reach this office make interesting and instructive reading. They show the strong and the weak points of the institute. They show, too, in our humble opinion, just where the mistakes have been made that caused their institute to dwindle in membership. For instance, a number of secretaries, in making their report, devote the most of their time to telling what their institute has done about hail insurance, elevator monopoly, grain standards, freight and tariff rates, while they say nothing, or but very little, about other meetings. Judging from their reports, these are the most important questions the farmers have to deal with. The Farmer admits that these questions are important ones and that there is no place where they can be discussed to better advantage than at institute meetings; but, we hold that they must not become the leading questions and monopolize too much time or the membership will certainly dwindle to a faithful few who are interested in such questions.

We like the reports of those institutes that tell of improved stock being brought in by its members, of rousing, helpful meetings, inspirations to better farming, of the introduction of new grains, fruits, etc., of the clubbing for good agricultural papers, and of the starting of reference libraries and plowing matches. These are the things that will build up an institute in numbers and influence for good in the land. The continual discussion of so-called "reforms" is not the first mission of an institute, but to furnish information, experience, and help along all the lines of farm work. There is ample scope for the best energies of an institute along these lines. There is no trouble to get farmers to attend where they know they will learn something, so all meetings should be planned to furnish information, and then there will be no trouble about lack of attendance or small membership. The discussion of "reforms" sends a farmer home with the idea that he is a down-trodden, much-abused individual and that there is no use for him to try to do well, because he will not reap the full fruits of his energies; but, the experiences and successes of others, helpful papers and the live discussion of farm topics, sends a man home with a conviction that he might and ought to do better; in fact, to be a better farmer.

Nelson.

This is one of the most flourishing institutes in the province. It was organized in June, 1895, and has continued to hold good meetings ever since.



Duncan Stewart,
President Nelson Farmers'
Institute.

The membership at its inception was 40, and it has always kept up to a good number. The members meet every two weeks during the winter. Papers are read by first one and then another on different subjects, and all are ready to take part in the discussions, which very frequently bring out the most valuable and practical thoughts. The plan adopted at this institute to get members to take part in for some one present at a meeting to volunteer to read a paper at the next meeting. If no one volunteers, some one is

then asked or appointed to do so. They generally get a paper. For fear that the person appointed should fail to prepare, either the president or the secretary has one up his sleeve, always ready, so that there will never be any disappointment.

As a means of keeping up the interest and a help in securing new members a portion of their funds is spent in obtaining for members either The Nor'-West Farmer or a choice of some small fruit plants. In this way the institute has been enabled to do considerable good. A representative has always been sent to the Central Institute, and the present president of the Central, A. P. Stevenson, is a member of this institute.

The president of the Nelson institute is D. F. Stewart, a young Scotchman from Argyleshire, where he was brought up as a shepherd. He came to Canada in 1883, working in Ontario for a year or two. In 1885 he came to Manitoba, hiring with a farmer at Nelson. He returned to Ontario in 1886, and to Scotland in 1887. The following summer he came back to Ontario, and in 1892 to Manitoba, where he started for himself near Nelson. Through hard work, combined with good sound sense, Mr. Stewart made a success of his farming, and now owns a half section of land and the stock and implements necessary to work it.

The secretary of the institute, Linneus Watson, hails from Clearville, Kent Co., Ont. The son of an editor, his early training was in the printing room, and until he was married. In the spring of 1883 he and his young wife came west to try their fortunes. He took up land at the foot of the Pembina mountains, near Nelson, and started to dig a fortune out of the soil, though, like many another man who has done well in Manitoba, he had never held a plow until he came to this country. He follows mixed farming and keeps accounts. In fact, can give an account of all the money he has spent or received since he began farming.

Rosser.

The institutes in some sections have had more or less of a struggle to keep going.



H. J. Beachell,
President Rosser Farmers'
Institute.

Those in more or less sparsely settled districts have felt this the most, while those in districts where all the land is taken up, and the most of it worked, do not have this trouble to contend with. Happily, the most of these newer districts are now settling up rapidly, and the new comers will form a welcome addition to the membership. Rosser district has suffered some in this way, but the large number of new settlers that have come into the neighborhood during the last year or two gives the institute secretary some hope that he may ultimately round up a good large membership.

Organized some four years ago, with a membership of twenty-five, the institute has done good work, and gradually, from



L. Watson,
Sec.-Treas. Nelson Farmers'
Institute.

year to year, increased their membership, until last year they had forty names on the roll. This year they are starting with the hope of putting the membership a notch or two higher. The meeting in January, which was addressed by the government speakers, was a good one and created considerable interest. The Department of Agriculture are doing a good work for the country and this institute in particular appreciates the effort that is being made to help the farmers. H. J. Beachell is president, and W. H. Beachell, secretary of the institute.

Virden.

This institute has taken a new lease of life this last winter. For several years before interest had lagged a little, for it seemed somewhat difficult to awaken any enthusiasm, and sometimes it took considerable rustling to secure members enough to entitle them to obtain the annual grant. But all this is changed now, for at present there are nearly 40 names on the roll, and before the next annual meeting it is expected that there will be over 50. During the past winter a number of rousing good meetings were held. At some of these meetings over 100 farmers from the district were present. Besides the topics usually discussed at institute meetings, hail insurance and government ownership of railways came up for discussion. Dairy matters and noxious weeds also received an extra share of the time at the various meetings. The institute, in conjunction with the agricultural society, have decided to hold a plowing match some time this summer. The energetic president of the institute is P. McDonald, of the Laggan Farm, while the pushing secretary is H. W. Dayton. The board of directors are Wm. Stephen, Wm. McDonald, Wm. Sproat, J. Caldwell, J. Wells and J. Elder.



W. H. Beachell,
Sec.-Treas. Rosser Farmers'
Institute.

Melita.

This live and progressive institute was organized in Feb., 1892. Its membership



R. J. Dobbyn,
President Souris Farmers'
Institute, Melita, Man.

has fluctuated from 30 to 80, but at all times there has been a large number of very active workers among the members, who were bound to make it a success. Besides dealing with the ordinary work of the farm, such as cattle, horse, sheep and swine raising, tree and small fruit culture, the cultivation of the soil, etc., the enterprising institute went farther a field in search of more knotty problems to solve. If passing resolutions would solve some of these problems and furnish a remedy, then this institute should have great honor. Early in its history it grappled with the elevator monopoly. It was up for discussion and a resolution passed calling for its abolition. The unsatisfactory grading of wheat was another subject that the members of this institute tried to settle, and they claim that the present

grading regulations are practically what they asked for some years before they were established. The teaching of agriculture in the public schools, excessive freight rates and high tariff rates are all questions which the members of this institute have taken a hand in trying to settle. Steps were also taken to erect a farmers' elevator and a cheese factory, but for lack of support both were abandoned. One of the last of a long



John Williams,
Sec. Treas. Souris Farmers'
Institute, Melita.

line of progressive acts of this institute was to establish a reference library of agricultural works free to members of the institute. This is a praiseworthy effort, and The Farmer wishes there were more of the institutes doing the same thing. This summer it is proposed to hold a plowing match.

The president of the institute is R.

J. Dobbyn, who for many years was an active supporter and director of the institute. He hails from Lambton County, Ontario, and came first to Manitoba in 1882, but returned to Ontario. It was not till 1892 that he finally came out for good, bringing with him his family and a good outfit. He homesteaded southeast of Melita, where he now has 1,300 acres of land, with good comfortable stone buildings, large enough to house 50 to 70 head of cattle, and also a nice stone house. Last year he sold 2,150 lbs. of butter, which averaged him 20 cts. a pound. He has been a director for four years, and president of the Agricultural Society for two years. He has also held various municipal offices in his municipality.

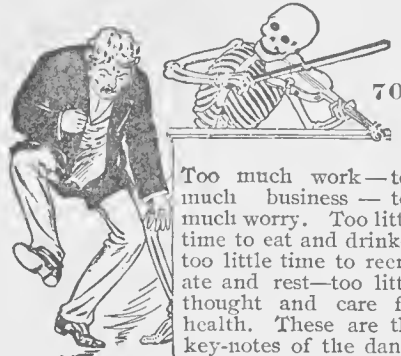
The secretary is John Williams, who came from Wales, in 1881, to the neighborhood of Hamilton, Ont. In 1882 he came to Manitoba without any capital. After working for farmers for a number of years, he homesteaded on the Souris river about four miles south of Melita. His farm now consists of a section of land, the larger portion of which is pasture land along the river flats, on which he pastures his high grade Shorthorn cattle. He has been a director of the local Agricultural Society for five years and has occupied the president's chair for three years. He has been secretary of the institute since 1892, except one year, when he was in the president's chair.

The reports are coming in from all parts of the continent of the damage done to the fruit buds of many of the fruits. In Ontario, New York and other states it is thought that the low temperatures reached this winter have practically destroyed the peach crops. A few places have been sheltered and it is hoped that the damage has not been as bad as reported. Other points have suffered some and there will be more than the usual amount of freezing back.

So far as our own province is concerned, while we haven't much fruit, the winter has been, no doubt, a very searching one, and we may look for a great deal of freezing back of all kinds of trees, especially in exposed places. The lessons, no doubt, will be numerous. One thing in favor of a somewhat light freezing back is the fact that the wood was pretty well ripened last fall. Enquiry among the nurserymen shows that these men are anxiously waiting the advent of spring. Some of them do not expect any more than the usual amount of freezing back, while others look for considerable more.

DANCING TO THE MUSIC OF DEATH.

Thousands and thousands of men, without realizing it, are daily dancing to the music of death. It is a measure that ever grows faster and brings a man rapidly nearer and nearer to the grave.



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who dances to them is soon in the grasp of general ill-health, and will speedily be in the relentless clutch of some fatal malady. It may be nervous exhaustion or prostration; some wasting disease, deadly consumption, or almost any ailment in the category of human ills. There is a sure, speedy, and permanent remedy at hand.

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"About two years ago I had grip, which left me feeling miserable—no strength and a cough," writes Mrs. C. Maynard, of East Lyme, New London Co., Conn. "As some of my family died with consumption I feared that, so I began taking Dr. Pierce's Golden Medical Discovery. After taking the second bottle I felt much better, and now am feeling very well for one of my age (sixty-three years). Have had a house full of company all summer and two hired men part of the time, and I have done all the work alone."

"About two years ago I was taken with eczema in its worse form," writes Austin Ramsey, Esq., of Saltillo, Huntington Co., Pa. "I commenced doctoring for it as soon as I found out what it was. Tried three doctors but got no relief. I thought it would set me wild; it itched and burned so badly, I thought I could not live. The neighbors thought I would never be cured. I wrote to you and you advised me to try your 'Golden Medical Discovery.' I commenced to take the 'Discovery' as you said. I took four bottles before I saw any change—then I began to get better. I have taken sixteen bottles in all. Took your 'Pellets' with the 'Discovery.' I am now about well. I had kidney trouble for four or five years and your 'Golden Medical Discovery' also cured that sound and well. I cannot say enough in praise of your 'Golden Medical Discovery.'"

"I consider Dr. Pierce's Golden Medical Discovery the finest remedy ever compounded, for bladder trouble," writes Prof. C. Chreiner, of Carthage, Jasper Co., Mo. "My case was a desperate one. I was alarmed, and had about given up all hopes. I consulted Dr. Anderson and he told me mine was the worst case of catarrh of the bladder he ever saw. He told me there was only one remedy in the medical world that he knew of that would reach my case and that was Dr. Pierce's Golden Medical Discovery. In less than one half-hour after I had my first dose I felt relief. Three bottles have cured me sound and well. Now where can I find words to express my gratitude?"

Rev. Dr. C. D. McDonald, of Grafton, N. Dak., President of the North Dakota Christian Endeavor Union, writes "Mrs.

McDonald thinks so much of your book 'Common Sense Medical Adviser' she wants a second copy of it—she has loaned to a neighbor the first. I enclose 31 cents for cloth bound copy."

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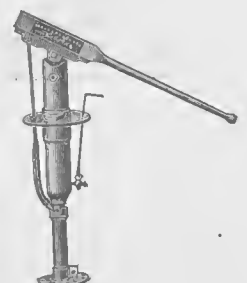
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Home Culture.

By a Farmer's Wife, Qu' Appelle, Assa.

I have been reading the essays, sent in by the farmers' wives, with a great interest, and as no one has touched upon one great feature, in my estimation, of perfect home life, I would like to give you some of my ideas. I have lived upon a farm for a number of years, and enjoy the freedom, the independence and true nature so much, that I do not in the least envy my city friends. What is more enjoyable than living upon a well-managed farm, if each member of the family is taught to make it so.

It should not be a one-sided affair, the husband and children expecting mother to wait upon them as well as looking to the hundred and one things that must be attended to properly, or farming does not pay, there must be thrift indoors as well as out, therefore upon the wife and mother depends a great deal. Let her teach the children as much as possible, from babyhood, to be self-reliant, and to exercise thought and loving care, for one who has so much to do with their welfare. Let each child have his or her work, and let them take an interest in everything, but see that they do their part promptly and well, no matter how trivial it may seem. Teach the boys to be kind and attentive to their sisters, and the girls to discountenance vulgarity and rudeness in their brothers or associates. Be kind, be patient and yet firm; have your home rules and see they are enforced. Above all things be careful whom you take into the family, as influence has so much to do with the young mind.

I never could see why because living on a farm people need be uncouth and away behind the times. There are so many good papers now-a-days that if we try we can in a measure keep posted upon the leading topics of the day, and when the family is assembled, talk over the items of interest, and you will be astonished at how much more it will do toward brightening the minds of your children than indulging in the gossip, which seems to interest so many parents as well as the children. It is a vile habit and the sooner discouraged the better.

No. As "A Daughter of Heth" says, do not let us work for the benefit of our neighbors. But, do you know a good example helps your neighborhood? If your home is neat and tasty, your children polite and kind, your husband attentive to his family, wearing a cheerful countenance and whistling about his work (characteristic of a happy man), yourself interested in your surroundings, and dealing out little acts of kindness, whenever the opportunity offers, you will have an untold influence for good in your community.

Now I would like to draw a couple of pictures and leave my readers to judge which is the nicer of the two. Farm No. 1. I drove up the lane, passed through the gateway (the gate was off its hinges), up to a fair-sized log house, and as I glanced around I noticed pillows in sev-

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eral of the windows, where glass should have been, everything wore a dilapidated air, and when Mr. A. asked me (not very warmly) in to dinner, I accepted, as I was very hungry after my long drive. As we entered the house, I saw the eldest daughter run into the pantry, and as she was too untidy to make her appearance, I did not see her again. The rest of the family rushed in pell-mell as Mrs. A. called out "Dinner, Dad," seated themselves at the table, and, as each child armed himself with a fork, reached over and helped himself, with no respect to those around him. The father sat at the head of the table in his shirt sleeves, his hair looking as though it was only combed on Sundays (and this was Friday), his hands were rather grimy, and he appeared oblivious to everything around him, as he helped himself and let everyone else do the same.

"The old woman," as I observed the oldest boy call his mother, was one of the happy-go-lucky sort, who never had any rules to go by, and, like "Topsy," her children just "grewed." I could not but think what a pity to see a family like this. No culture, no refinement, and smart enough, too. But it is not their fault. With no example for them to follow, no influence in the right direction, no work assigned them, but simply allowed to run here and there at will, some days at school, more often not, is it any wonder they are afraid to see strangers in that home?

Farm No. 2 is very different. The buildings are neat and well-kept, even if they are log. As I drive up Mr. B. greets me cordially. It is just the dinner hour, and he does not hesitate as he invites me in. I accept also without hesitation, for what is a better appetiser than this western air. I am introduced to Mrs. B., who is a bright little body, and neatness itself in her print gown. Her table is nicely set, the tablecloth plain, but as white as snow. The dinner, although not elaborate, is so palatable that it is fit for a prince. The children come in, their jackets are clean, their faces washed and hair combed. They sit quietly at the table until waited upon by their father. I cannot help noticing how nicely they handle their knives and forks, and the extreme politeness in their manner towards their father and mother. These children never think of addressing their parents as the "old man" or "old woman," for they are not brought up that way, but are taught to be polite from infancy. It cost nothing but thoughtfulness upon the part of the parents in setting a good example.

This home is a pleasant place to live in. If one of the boys in time leaves the farm for city life, he is not afraid to bring a college chum home with him, for has he not learned to be polite and refined there. How he respects the little mother who has been so much to him, and he looks anxious as he perceives how much older she has grown since he last saw her.

Yes, if we lead useful, Christian lives, our influence at home and abroad will be for good, and then, when we are called to

a better home, we will leave foot-prints on the sands of time.

Footprints that perhaps another
Sailing o'er life's solemn main,
A forlorn and a shipwrecked brother
Seeing may take heart again.
Let us then be up and doing,
With a heart for any fate;
Still achieving, still pursuing,
Learn to labor and to wait.

No one knows better than those who have used Carter's Little Liver Pills what relief they have given when taken for dyspepsia, dizziness, pain in the side, constipation and disordered stomach.



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NO EMPLOYEE OF THE SOAP WORKS ALLOWED TO COMPETE

How to Train a Girl to Womanhood.

By Polly Prim, Elkhorn, Man.

Let us take for granted that the typical girl whom we have to study and fit for womanhood is about ten years old. Her parents are neither rich nor poor. She has had the sort of training that is usually given to Canadian girls. That is, she is good-hearted, but wilful, somewhat selfish, fond of good clothes, bright, but not very studious, fond of fun and romps, as all healthy girls should be, but not anxious to stay at home and help her mother. How shall we train this girl to be-

ly watched—without her knowledge. Do not think because she is your girl there is no danger of her having been contaminated. Some of the girls least likely to be suspected are too often misled. Study all her symptoms, and make sure that her mind is pure and her habits likewise. I maintain that children who have a mother's watchful care and sympathy will never acquire evil habits.

Let me say a few words about the clothing which our girl should wear. Let it be simple, made of durable materials that will stand all the romping she wants to do, and don't put much starch, lace or embroidery into it. Let all her clothes hang from the shoulders. Avoid a stiffened waist or corset as you would an abomination.

to be married or to plan her life differently. This is the time when she should have all the sympathy of both parents. She should be able to talk to them freely upon the subjects which interest her most, whether it be "boys" or metaphysics. This is the period of change when a harum-scarum girl may become wild and fast or thoughtful and womanly. As we love her let us watch and counsel her now. Her passions are high and her temptations great, and they will be for ten years. She must be fully occupied now, if never before. Let her have fun, and plenty of it, of a healthy kind, but let her always be accompanied by her sympathetic father, mother or wise friend. At any rate, know where she is and with whom she is.

Teach her to sew, to cook, to nurse the



"Please do Lift Me Out."

come a true, noble, helpful woman and mother?

In the first place let us look to her health. She has almost reached the "growing period," and needs to be looked after carefully. Her eyes should be tested to find if her sight be normal, for herein often lies the cause of headaches, eyestrain and nervousness generally. If there is any defect, it should be remedied at once by giving her a seat in school, closer to the blackboard, or away from the light, or, if necessary, by the use of glasses. Her hearing must be tested also, for frequently children are called stupid and reproached before their schoolmates when they are unable to hear.

At this time, too, bad habits are apt to be formed and her actions must be close-

We must also pay especial attention to the food we give our girl. It is not enough that she have all she wants to eat. What she eats must properly nourish her, which is a very different thing. Bread made from entire wheat flour should be used instead of white flour bread. This, with different breakfast foods, eggs, milk, vegetables, fruits and nuts, form a proper diet for growing girls. While I do not entirely exclude meat, I do not consider it necessary.

Perhaps the most momentous period of a girl's life is when her brain stops growing in size, while it continues to grow more active and complex. At this time, if ever, she becomes ambitious. She builds her castles in the air. She makes up her mind whether she wants

sick, to care for children, besides teaching her the things which are usually taught nowadays in the form of school education.

We do not want our girls to be slangy, to chew gum, to use slovenly English, to walk ungracefully, to be headstrong, or unladylike, or deceitful, or nervous, or stupid—and she need be none of these, if suggestions to the contrary be properly employed.

In these days of ferment and talk about training for this, that, or the other thing, there is no training, it seems to me, easier to carry out or fuller of everlasting benefit to all mankind than that of training our girls into healthy, intelligent, moral types of womanhood, fitted to regenerate the world.

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Pearce's Canadian Giant Mangel.

The best selected stock of Long Red Mangel grown, immense cropper. 1 lb. 12c., post-paid, 16c.

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No Swede ever grown has produced such crops, good keeper, good quality, good shape. 1 lb. 15c., post-paid, 19c.

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Best White Carrot grown, so say the Guelph and Ottawa Experimental Farms' Reports. 1 lb. 30c., post-paid, 34c.

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For sheep pasture or plowing under this is the best article grown. 1 lb. 10c., 10 to 25 lbs. at 8c. per lb., 50 to 100 lbs. at 6½c. per lb. Postage, 5c. per lb.

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Siberian Millet (New).

Makes the grandest fodder imaginable, and for hay cannot be excelled, and prolific seeder. Stools immensely. For the virgin soil of Manitoba and the Territories 6 lb. to acre ample. Per lb. 25c., 6 lbs. (enough for an acre) \$1.25, post-paid.

Early Michigan Potato.

Tested with hundreds of varieties; most prolific; earliest variety grown. Good cooker, good color. Grand potato. Try it. Per lb. 25c., 3 lbs. 60c., post-paid.

JOHN S. PEARCE & Co.,

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A Few Suggestions.

By Martha, High Bluff, Manitoba,

I am a farmer's wife and have a happy home. If a few suggestions from me will aid anyone in the slightest degree, I will feel well repaid for my attempt at writing an "essay." I think we should all have a programme of work for our homes and then we will work methodically. Vary this programme to suit our circumstances.

Know in the evening what you are going to wear in the morning, and have your costume ready so you can perform your toilet well and quickly. I use a wrapper, linen collar and large apron. Before leaving your room take a few minutes to ask Divine help to enable you to be patient and cheerful. Your breakfast having been planned the evening before, you can commence operations at once.

Breakfast over, do your dishes at once and you will be ready for other work. I never find it advisable to leave dishes standing. Plan for your dinner while performing the lighter duties of the household.

I always leave my bedroom to air until I have time to spend a few minutes in Bible reading and prayer. Sometimes I have been so rushed with my work that I had to leave it until after dinner was over.

I do not believe in daily sweeping and dusting, only when really a necessity. When I sweep my house thoroughly once a week, then only a little brushing does me. I haven't a carpet sweeper or a mop, but if I had, I would certainly use them, as I think anything that lightens labor in the home should be used, so as to give the extra minutes to children, husband or self-cultivation.

I try to get all my hottest work done in the forenoon, such as cooking, washing, etc. If you work quickly in the morning you can accomplish a great deal. I always have my meals planned before their time, and use as much variety as possible. We use a great many vegetables, as they are cheap and easily raised on a farm.

I use eggs quite plentifully, and also cream. I think it a wrong idea that some farmers' wives (I know a few) have of selling all their eggs and letting their own families do without. I do not consider that practical economy. I think we

should keep enough hens, so as to use as many eggs as are needful, and sell the remainder.

Do not work when very tired. Lie down and rest a few minutes and all will go smoothly when you get up. I prepare my Sabbath work on Saturday, and have a warmed-over dinner on Sunday. We have good, wholesome food, but plain and easily prepared. I do not clean my lamps on Sunday and rest from the active duties as much as possible.

Dear wives of farmers, I know your trials and troubles, for I am one, and have to do all my housework alone, but let us arise above household worries and strive each day to be less flurried and anxious. Let us give up our hasty speeches, so our homes will be the brighter and our husbands happier, then our children will love to be more with us and desire to grow more like us.

Note.—We feel sure that the readers of the Household columns would like to have some of Martha's plans for meals. Would she kindly favor us with some of them?—Ed.

Never hit a man when he's got you down.

A law was passed recently in Norway which requires a girl to hold a certificate of skill in cooking, knitting and spinning before they are eligible for matrimony.

Do not despair of curing your sick headache when you can so easily obtain Carter's Little Liver Pills. They will effect a prompt and permanent cure. Their action is mild and natural.

When a married couple or a pair of shoes are exactly alike they fail to make a fitting pair.

The noxious taste of many wholesome drugs is so much against their use that a few hints as to harmless disguises of the flavors may be useful. A little extract of licorice destroys the taste of aloes. Peppermint water disguises the unpleasant taste of salts. Milk counteracts the bitter flavor of Peruvian bark. Castor oil cannot be tasted if beaten up and thoroughly mixed with the white of an egg. Another way of administering this disagreeable medicine or cod liver oil is to put a tablespoonful of strained orange or lemon juice into a wine glass and pour the oil into the centre of the juice, and then squeeze a few drops of the juice upon the oil and rub the edge of the glass with the fruit.

People with due regard to hygiene repaper their dwellings frequently, a thing made possible by the cheapness of wall papers. This is particularly desirable in the sleeping rooms and in the nursery. Children frequently have eruptive disorders, and after such attacks it is important that their rooms should be refreshed in this way. One often wonders at the callousness with which women permit little children to occupy a room in which measles, for instance, has been in full blast. Sometimes you hear a housekeeper boast of how long a term of years such a wall paper has been in use! The so-called sanitary wall-papers have much to commend them. They can be wiped off with a damp cloth, and are well adapted to use both in nurseries and bath rooms.

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WE WANT ALL FARMERS and others coming to Winnipeg to COME AND SEE our two stores and see what

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we have. Call and see our 4-piece GLASS TABLE SET, in emerald green or crystal at 50c. a sett.

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WORK DONE WITH THOROLD CEMENT

SPEAKS FOR ITSELF.

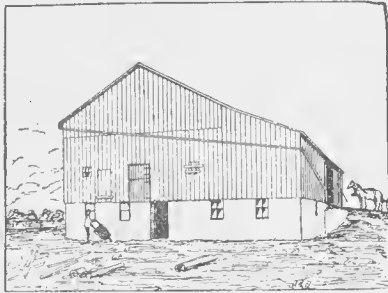
Examine the following neat and attractive views of some Houses and Barns it has built with great satisfaction.

Kerwood, Tp. Adelaide, Middlesex Co. Ont., Dec. 22, 1896.
ESTATE OF JOHN BATTLE, THOROLD, ONT.:

Dear Sirs,—Having used your Thorold Cement in my concrete dwelling this last season, I found it a success and most satisfactory in every particular, and equal to if not better than any Canadian cement that I have ever used. I raised my planks three feet one day, part of it being a single plank. Would prefer the wall to any brick wall. Having run out of Thorold Cement, and not being able to wait until you could send me more, I used some other cement, and must say that the Thorold Cement gave me the best satisfaction.—JOSEPH HARRIS.



Concrete Residence of Joseph Harris, near Kerwood, Ont.
Built with Thorold Cement in 1896.

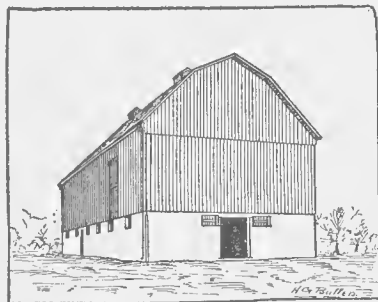


Barn of Benjamin Pile, Parkhill, Ont.
Size of Walls, 50 x 81 x 10 feet high. Built with Thorold Cement in 1898.

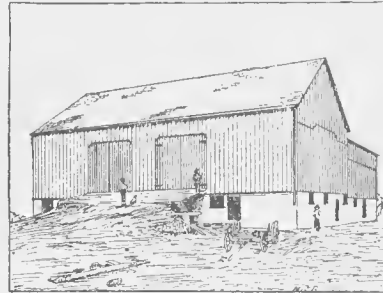
Parkhill, Ont., Dec. 8, 1898

ESTATE OF JOHN BATTLE, THOROLD, ONT.:

Dear Sirs,—It is with pleasure that I testify to the good qualities of your Thorold Cement for building purposes. During the past summer I have built a basement under my barn 50x81x10 feet high wall twelve inches thick; and also a cistern under the approach to the barn, 10x20x7 feet high, wall around cistern fourteen inches thick and arched over top twelve inches thick. It took ninety barrels to build those walls. The work was done under the direction of your Mr. Norval Hagar. The total cost of building wall and cement was \$150. I also put a floor with your Thorold Cement in all my stabling except two box stalls. I used about sixty barrels of cement for floor. The floor cost me about \$90 for work and cement and also the gravel. I consider it cheaper than flooring with lumber. The flooring was done under the direction of your traveller, Marcus A. Ware, who has put in a number of floors in barns and other buildings around here, and has given good satisfaction. I also send you photo of the barn. Yours truly,—BENJAMIN PILE.



Barn of Wm. Patton, South Cayuga, Ont.
Size of Basement Walls, 36 x 60 x 9 feet. Built with Thorold Cement in 1898.

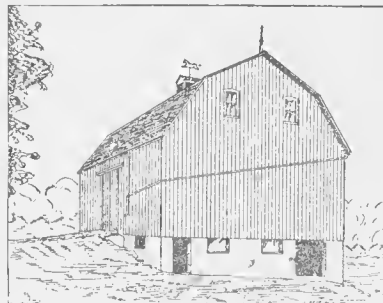


Barn of Allan McMane, Atwood, Ont.
Size of Walls, 84 x 100 x 9 feet high. Built with Thorold Cement in 1898.

Atwood P. O., Elma Tp., Ont., Nov. 15, 1898.

ESTATE OF JOHN BATTLE, THOROLD, ONT.:

Gentlemen,—I have used your Thorold Cement and find it very satisfactory. I built my barn walls, 84x100x9 feet high, with it. If I had stone on the ground I would not use it, as I much prefer a concrete wall built of your Thorold Cement and gravel. My walls are here for inspection, lots 24 and 25 Elma Township. I strongly recommend your Thorold Cement to all farmers who intend building barn walls. Yours respectfully,—ALLAN MCMA NE.



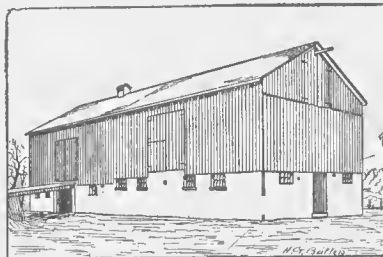
Barn of Wm. Patton, South Cayuga, Ont.
Size of Basement Walls, 36 x 60 x 9 feet. Built with Thorold Cement in 1898.

Dunville, Ont., Nov. 1, 1898.

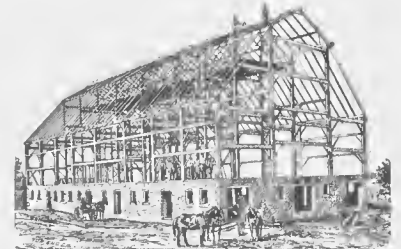
ESTATE OF JOHN BATTLE, THOROLD, ONT.:

Dear Sirs,—It is with pleasure that I testify to the good qualities of your Thorold Cement for building purposes. During the past summer I have built a barn 36x60 feet, with basement walls nine ft. high, and with cistern under driveway 8x19x7 feet high. I also put concrete floors throughout, for cow stalls as well as horse stalls. I consider both walls and floors to be much better and cheaper than if they were built of any other material.

Sincerely yours, WILLIAM PATTON.



Barn of Wm. I. Weir, Crumlin, Ont.—Size Walls, 34x102x9 ft.—Built with Thorold Cement in 1896.



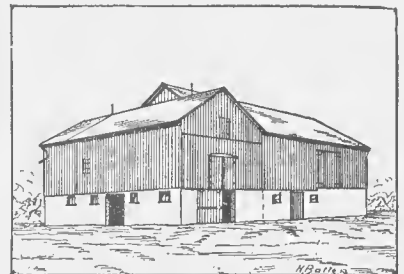
Barn of Beswetherick Bros., Hagersville.
Size of floor, 60 x 120 feet. Put in with Thorold Cement in 1898.

Hagersville, July 1, 1897.

ESTATE OF JOHN BATTLE, THOROLD, ONT.:

Dear Sirs.—Having used your Thorold Cement in our stable floors, which were put in last fall under the supervision of your Mr. Ward Hagar, we must say it has given us good satisfaction in every particular. Our floors are as hard as stone. We clean our stables by driving a team and wagon through the stable on the concrete behind our stock and load the manure on the wagon. We can truly say it is just perfection for stable floors. Yours, etc.,

BESWETHERICK BROS.



Barn of R. W. Jackson, Ilderton, Ont.
Built with Thorold Cement in 1898.

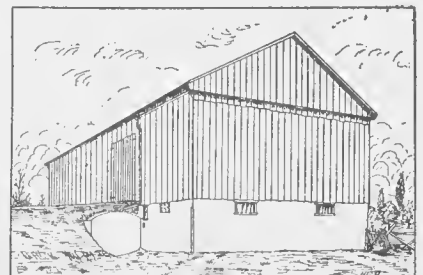
Ilderton, Ont., March 9, 1899.

ESTATE OF JOHN BATTLE, THOROLD, ONT.:

Dear Sirs,—I have much pleasure in testifying to the excellence of your Thorold Hydraulic Cement for building purposes. In June last year I built under my barn a concrete wall of your Thorold Cement. It turned out a splendid job, and I have no hesitation in recommending your cement to those requiring its use. Your traveller called here and gave me instructions for a few hours as to the proper method of using it. I then completed the wall myself. Yours truly,—R. W. JACKSON,

County Councilor Middlesex Co.

P.S.—It is with pleasure I give you my testimonial, as your Thorold Cement is all you represent it to be.—R. W. J.



Barn of Geo. Axford, Talbotville, Ont.—Built with Thorold Cement in 1896.

Ilderton, Ont., Jan. 27, 1899.
ESTATE OF JOHN BATTLE, THOROLD, ONT.:

Dear Sirs,—We think Thorold Cement is the best cement in use for building walls and floors in stables. Last June I built a wall 36x100x11 feet high at back and 8 feet at front. We were twelve days building it, under the management of Mr. P. Rowley, Ilderton (five men in all.) We raised the barn on the wall in twelve days after it was completed. The next day there came a hurricane, which blew down the framework. It all fell on the wall but one bent. The posts were twenty-six feet long, and seven of them broke. The wall stood the test, which was a very trying one, and it only chipped off a little in one place. I intend putting floors in this spring with Thorold Cement, for I think no other cement could have stood such a test. Yours truly,

BURT KENNEDY.

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ESTATE OF JOHN BATTLE, THOROLD, ONT.

THE STEVENS MANUFACTURING COMPANY,

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WRITE FOR PRICES.

PLEASE MENTION THIS PAPER.

Recipes.

Oatmeal Cakes.—Rub a teaspoonful of lard into a handful oatmeal; mix with a little hot water; roll out and bake in a pan. Do one at a time.

Scotch Shortbread.—One-half lb. sugar, ½-lb. butter, ½-lb. lard, 2 lbs. flour. Mix all together, put down in a cake tin about three-fourths of an inch thick and bake a light brown. Let it remain in pan after coming out a little while.

Calf's foot broth is tasty and nourishing. Stew the foot in three pints of water, with lemon peel, very gently till the water is reduced one-half. Take off scum. Set by in a basin till cold. Then remove all fat. Warm up half, add a little butter, sugar, and a little grated nutmeg; take off fire, add the beaten yolk of one egg; keep stirring for five minutes, and serve.

Rice Blanc Mange.—Half a pound ground rice, one quart milk, three ounces sugar, the rind of half a lemon, half a teaspoonful vanilla essence. Boil the rice in the milk for about twenty minutes with the sugar and rind of half a lemon; when done remove the lemon-rind, and add the vanilla essence, dip the mold in cold water, pour in the rice, and when quite cold, turn it out.

One can rarely cook just enough ham, and as it does not warm over as satisfactorily as some other things what is left over is apt to be wasted. A nice dish may, however, be made by covering a pan with bread crumbs and over them placing the slices of ham which are sprinkled with additional bread crumbs; put the pan in a warm oven till its contents are heated through and a savory dish will result.

Few are aware of the nourishment that is in a beef bone. A good bone can supply a few good dinners for a family, then make a good dinner for the dog. Put on to boil six or seven hours. Skim all fat off. Take two onions, a cup of rice, a grated carrot. Make as much as will do for two days. It is just as nice on the second day as the first. Eat with bread or crackers. This makes a nice, cheap and nourishing dinner for old and young.

Potato Soup.—Pare eight medium-sized potatoes; boil them until fully done; drain the water into a dish and keep it. While very hot rub the potatoes through

a sieve, pour the water in which they were boiled over them, add salt, pepper and a piece of butter the size of an egg. Dissolve one teaspoonful of flour in a cup and a half of cold, fresh milk, and when the soup boils stir this in gradually, keeping the liquid moving lest it burn. Serve with toast in dice shape. The quantity is sufficient for six small helpings.

Raisin Bread.—Stone enough raisins to make a coffee cup heaping full, when chopped fine; add one-fourth of a pound of almonds, shelled and blanched; chop or shred them fine—they are much better shredded—grate one-quarter of a pound of chocolate with one teaspoonful of cloves, one teaspoonful of baking-powder, and four teaspoonfuls of milk. Mix in flour until just stiff enough to spread into cakes the size of the top of a coffee cup, and about one-eighth of an inch in thickness. Be sure the cakes are well-baked. When done, invert the pan upon thick cloth, and with a sharp knife cut the cakes in strips two inches wide. Pack them away in a dry place. They will keep for weeks.

A reader has sent us the following recipes that she has tried and found very satisfactory:—

Croquettes may be made from any cold meat which may accumulate—chicken is best, but beef, mutton, or any other cold meat will do. Put two tablespoonfuls of butter in a pan on the fire, melt without browning, mix four level tablespoonfuls flour with butter, cook two or three minutes; now add half-pint of milk and stir till it thickens, beat smoothly, add half-teaspoonful salt, quarter teaspoonful white pepper, one teaspoonful onion juice (by bruising and squeezing an onion), and one tablespoonful finely chopped parsley. Have half-pound, or half-pint heaping, of meat finely chopped, then mix into the paste thoroughly, spread the whole on a shallow dish to cool. When cool, shape into cubes, roll in bread-crumbs, then in a well-beaten egg to which one tablespoonful of hot water has been added, then into bread-crumbs again, fry in smoking beef dripping till a golden brown. Never use the yolk of an egg alone for dipping.

Meat Pie.—One pound any kind of cold meat, half pint cold boiled potatoes, one pint of stock or gravy thickened with four level tablespoonfuls flour, one table-spoon-

ful chopped parsley, two slices of onion, piece of butter, salt and pepper. Boil for ten minutes, put half of meat in bottom of dish after cutting in small pieces, then the sliced potatoes, then the rest of meat, then pour over all the gravy or stock prepared. Make the crust of one pint of flour, half-teaspoonful of salt, and 1½ teaspoonfuls baking powder. After sifting these together three times, rub three level tablespoonfuls butter well in, then stir in carefully, starting at the centre with a knife and working out, half cup milk. The dough must be soft, but do not handle. Roll out half inch thick, put well on top of dish. Bake in a quick oven 20 to 25 minutes, after cutting small slit in centre.

Crullers.—Cream, three level tablespoonfuls butter by beating in a dish in which boiling water has stood for a few minutes, gradually add 1½ cups of granulated sugar, beating all the time, then add three stiffly beaten eggs, gradually add one cup of cold water. Sift one quart of flour with ½ teaspoonful salt, one level teaspoonful soda, two heaping teaspoonfuls cream tartar, and scrape of nutmeg. After sifting, gradually add to mixture, roll out half inch thick. Flour cutter and cut in rings. Fry in hot beef dripping seven minutes. Test fat by putting in small piece of bread, if the bread browns in 20 seconds it is hot enough for crullers.

Useful Things to Remember.—One pint of butter is one pound; one quart of flour is one pound; one level tablespoonful of butter is ½-ounce; one pint closely packed chopped meat is one pound.

Life insurance is a good thing, but health insurance, by keeping the blood pure with Hood's Sarsaparilla, is still better.

That tired, languid feeling and dull headache is very disagreeable. Take two of Carter's Little Liver Pills before retiring, and you will find relief. They never fail to do good.

ROBT. LECKIE,

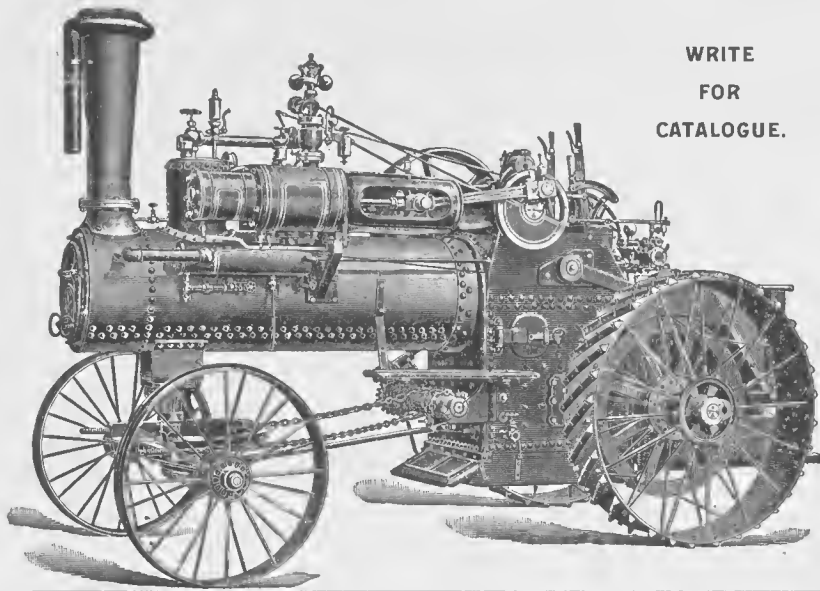
IMPORTER AND DEALER IN

Wall Papers & Room Mouldings.

Samples and Prices on application.

425 MAIN STREET, - WINNIPEG.
P.O. Box 317.

THE "CASE" DOWN'S THEM ALL!



WRITE
FOR
CATALOGUE.

To JOHN CRAWFORD,
Agent Case T. M. Co.,
Neepawa.

Neepawa, Jan. 31st, 1899.

Dear Sir,—In reference to the J. I. Case Separator (36x58) purchased last fall, I have to say I am well satisfied with the same. It has given me great satisfaction. I have had several other makes of Separators, but the Case downs them all. I can put more grain through it, thresh it cleaner, drive it easier, move it easier, and in fact do more good work with it in the same time than I could with any machine I have had. About all I can add to this is, sell all you can of them, and I believe your customers will be satisfied.

Yours,
H. STEWART.

(Signed)
(Copy.)

J. I. CASE THRESHING MACHINE CO.

D. B. MACLEOD,
GEN. AGENT, WINNIPEG, MAN.

How to Repair a Worn-out Floor.

The following plan of repairing a worn-out floor, taken from an American exchange, may be of use to some of our readers:—Make a cement by soaking thoroughly some old newspapers in a paste made of one pound of flour to every three quarts of water, and one tablespoon of alum thoroughly boiled and mixed together. Have this mixture about as stiff as putty. Now fill all the holes full and level, smooth with a putty knife. This cement will harden like papier mache. Then if you want to add more to the attraction of the floor, take grey resin sized sheathing paper and carpet the floor all over, using glue (or flour paste) to put paper down with. Put paste or glue on under side of paper to size or shrink it, then put on the floor like wall paper, but do not lap the edges, just bring them together. If it is not done this way the result will not be satisfactory. The paper must be sized the same as wall paper. This paper comes in rolls of five hundred square feet and is about seventy-five cents per roll, thirty-six inches wide. Then get a good grade of floor paint any color to suit your room, give three good coats of this paint to begin with, then one a year. One quart will give a good sized floor two coats and will dry in one night. Always let one coat get perfectly dry and hard before applying the next one. By this means you can lay a cheap floor and one that is easily kept clean. You will not have to break your back cleaning dirt out of those horrid cracks and your house will be warmer. A few squares of oil-cloth laid around the stove and table will save paint and help to brighten up. This floor can be cleaned like oilcloth. For worn-out porch or veranda floors fill cracks with same cement but use roofing felt to cover floor with. Put down paper with glue, then use tacks besides, as rain might run under and loosen the glue. This is especially recommended for outside floors also kept well painted. Try this friends, that want a good, cheap floor, and you will be well pleased.

Never repeat and make fun of the mistakes of one friend to another, they may come round again to her ears and it will be sure to cause pain when she knows that you, whom she took to be her friend, have been laughing with others over her mistakes.

Salt Raised Bread.

Some people do not like hop yeast bread and claim great superiority for what is called salt-raised bread. It is made as follows:—Sift into a pint of scalding hot water as much flour as will make a thick batter; add to this half a teaspoonful of salt, and beat it vigorously together till quite smooth and full of air-bubbles. Cover this closely and let it stand in a warm place, the dish containing it being set in another full of warm water and let it stand all night. Next morning scald a pint of milk, and when this is lukewarm add to it a teaspoonful of salt and enough flour that will make a batter that will drop but not run from the spoon. Into this pour the mixture made overnight, which should be very light, and have a distinctly unpleasant smell; beat these two mixtures thoroughly together 3 or 4 minutes, then cover the pan with a thick cloth, and again stand it in a pan of warm water, and leave it for two hours in a warm place, when it should be very light indeed. Now add enough flour to make it a nice dough, knead it conscientiously till it is quite smooth and elastic, when you divide it up into loaves; place these in buttered tins, cover with a cloth, and when they have again risen bake for an hour in a moderate oven. The chief point to remember about this bread is that it must be kept much warmer than yeast bread.

Men of sense sometimes make cents out of nonsense.

No man ever gets so poor that he can afford to have holes in his pockets.

Many an ignorant man is credited with superior intelligence simply because he doesn't try to show off.

To clear a house of roaches equal quantities of sugar and pulverized borax is recommended. Spread where the insects congregate the most.

Add borax to the water in which red-bordered napkins and towels are washed; it will prevent fading. They should be dried quickly to get really good results.

To remove the smell of new paint, lay a bunch of hay in the room and sprinkle it with a little chloride of lime. Close the room for several hours, and when it is again opened the smell of paint will be all gone.

How to Clean Gloves.

Here is a glove "wrinkle" used by a well-known society lady, and which is vouched for by her as infallible in its effects: She procures a tin box, or a jar with a tight, close-fitting cover, and puts into the bottom a lot of lump ammonia. Then she suspends the gloves in the box or jar, closes it tightly, and allows it to remain this way four or five days. At the end of this time she removes the gloves, and every spot will be found to have vanished.—The Ladies Journal.

Dip a woollen cloth in camphor and rub spots on furniture if you wish to brighten it.

It is said that a rag soaked in a cayenne pepper solution and stuffed in a rat hole will set them all scampering off the place.

For the sick room a simple disinfectant is made by putting some ground coffee in a saucer and in the centre a small piece of camphor gum. Light the gum with a match. As the gum burns allow the coffee to burn with it. The perfume is refreshing and healthful, as well as inexpensive.

It often happens, to the annoyance of the housewife or the kitchen worker, that a stone jar or an earthenware vessel leaks because of some crack. A remedy is suggested which has proven efficacious, although it sounds as senseless as a negro superstition. Put the cracked jug into a kettle large enough to hold it conveniently, and cover it completely with cold milk. Set it over a moderate fire, and let it boil until half the milk has boiled away, then set it outside and when quite cold remove the jug, wash off all traces of its milky bath and test the efficacy of the experiment.

To get relief from indigestion, biliousness, constipation or torpid liver without disturbing the stomach or purging the bowels, take a few doses of Carter's Little Liver Pills; they will please you.

Dyspepsia in its worst forms will yield to the use of Carter's Little Nerve Pills, aided by Carter's Little Liver Pills. They not only relieve present distress, but strengthen the stomach and digestive apparatus.